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ASIATIC RESEARCHES;

OR,

TRANSACTIONS

OF THE

SOCIETY INSTITUTED IN BENGAL,

For inquiring into the

History and Antiquities,

THE

ARTS, SCIENCES, AND LITERATURE,

OF

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Table of Experiments to Investigate the Effects of Terrestrial Refraction.

Month and days.	Time of observation.	Number of ditto.	Barometer.	Thermometer.	*Depression of Foot of Flag-Staff, S. Ext. of Line.* Depressions reduced.	Difference.	Difference of moisture and dryness.	Absolute degree of moisture.	Increase or decrease of density in the air.	Refraction.	*Depression of Top of Flag-Staff, S. Ext. of Line.* Depressions reduced.	Difference.	Difference of moisture and dryness.	Absolute degree of moisture.	Increase or decrease of density in the air.	Refraction.	*Elevation of Foot of Muntapun.* Depressions reduced.	Difference.	Difference of moisture and dryness.	Absolute degree of moisture.	Increase or decrease of density in the air.	Refraction.	*Refractions compared.* Foot of flag-staff + than top.	Foot of flag-staff + than Muntapun.	Top of flag-staff + than Muntapun.	*Ratio of Refraction to the contained Arc.* Foot of flag-staff.	Top of flag-staff.	Muntapun.	REMARKS.
7th.	6 39	1	27	75	6—13 27			345	1000 202	29 82	4—07 93	+ 6 36		348	1000 202	30 77							— 0 96			1	1		Sun shining.
	6 54	2	27	75	6—28 21	+14 95	D 85	260	1000 202	14 83	4—14 29	— 8 70	D 54	260	1000 202	24 44							— 9 51			13 24 / 1	12 82 / 1		Ditto, ditto.
	7 26	3	27	74	6—20 35	— 7 86	D 54	206	1000 202	22 74	4—05 59	+22 08	D 43	206	1000 202	33 11							—10 38			26 52 / 1	16 16 / 1		Ditto, ditto.
	8 17	4	27 05	73							4—27 67	— 7 08	M 61	163	1000 271	11 03	10 6 27	—18 22	M 61	163	1000 271	6 03			+ 5 00	17 35 / 1	11 91 / 1	1	Ditto, ditto: a good deal of motion in the atmosphere.
	10 37	5	27 05	76							4—20 59	+ 9 42	D 195	224	1000 271	18 1	9 48 05	+ 8 26	D 195	224	1000 271	Negative.					35 75 / 1	42 83	Ditto, ditto: great motion in the air; flag very indistinct.
	12 10	6	27	80							4—30 01	—11 82	M 93	29	1000 202	08 70	9 56 31	+ 5 12	M 93	29	1000 202	1 06			7 70		21 78 / 1	1	Light clouds: flag very indistinct.
	2 8	7	26 9	84							4—18 19	+ 3 96	D 21	122	1000 065	20 51	10 01 43	—10 44	D 21	122	1000 065	3 61					45 36 / 1	244 05 / 1	Light clouds: sun shining occasionally.
	4 8	8	26 9	85							4—22 15	—16 44	D 48	101	1000 065	16 55	9 50 99	+12 78	D 48	101	1000 065	Negt.			16 91		19 23 / 1	71 66	Ditto, ditto.
	4 25	9	26 9	85	6—28 75			53	1000 065	14 34	4—05 71	+ 4 62	D 38	53	1000 065	33 00	10 03 77	— 3 90	D 38	53	1000 065	4 79	—18 66	+ 9 55	28 31	23 83 / 1		1	Sun shining.
	4 51	10	26 9	83 5	6—30 61	+ 1 86	D 38	15	1000 065	12 48	4—10 33	+ 7 86	D 15	15	1000 065	28 37	9 59 37	+ 1 56	D 15	15	1000 065	2 83	—15 90	9 65	25 55	27 52 / 1	11 96 / 1	54 01 / 1	Sun shining.
	5 7	11	26 9	84	6—31 39	+ 0 78	D 15	0	1000 065	11 70	4—18 19	— 7 2	M 70	0	1000 065	20 51	10 1 43	— 5 50	M 70	0	1000 065	3 61	— 8 82	8 09	16 91	31 62 / 1	13 90 / 1	91 41 / 1	Sun shining: light clouds.
	5 25	12	26 95	83	6—19 57	— 2 82	M 70	70	1000 131	23 52	4—11 17	—15 00	M 110	70	1000 131	27 53	10 6 93	+11 74	M 110	70	1000 131	6 36	— 4 02	19 16	21 18	33 73 / 1	19 23 / 1	71 66 / 1	Ditto, ditto.
	5 37	13	26 95	81	6—08 53	—11 04	M 110	180	1000 131	34 56	3—56 17	+13 56	M 33	180	1000 131	42 53	10 18 67	+ 0 88	M 33	180	1000 131	12 23	— 7 98	22 33	30 31	16 77 / 1	14 33 / 1	40 67 / 1	Ditto, ditto.
	6 3	14	26 95	80	6—09 31	+ 0 78	M 33	213	1000 131	33 78	4—09 73			213	1000 131	30 77	10 19 55			213	1000 131	12 67	+ 3 00	21 11	18 11	11 41 / 1	9 27 / 1	21 15 / 1	Ditto, ditto.
8th.	5 55	1	26 9	70	6—00 67			365	1000 065	42 42							10 26 25			365	1000 065	16 02	—	26 40		11 68 / 1	12 82	20 41 / 1	Hazy.
	6 20	2	26 9	69	5—59 83	— 0 84	D 52	313	1000 065	43 26	3—41 83			313	1000 065	56 87	10 23 51	— 2 74	D 52	313	1000 065	14 65	—13 62	29 61	42 23	9 30 / 1		16 15 / 1	Ditto.
	6 58	3	26 9	69	6—06 13	+ 6 30	D 35	278	1000 065	36 96	3—56 95	+15 12	D 35	278	1000 065	41 77	10 23 51	0	D 35	278	1000 065	14 65	— 4 80	22 31	27 11	9 12 / 1	6 93 / 1	17 66 / 1	Sun shining.
	8	4	26 95	70	6—32 17	+26 04	M 45	322	1000 131	10 92	4—10 33	+13 38	M 45	323	1000 065	28 37	10 15 59	— 7 92	M 45	323	1000 065	10 69	—17 46	0 26	13 19	10 68 / 1	9 45 / 1	17 66 / 1	Sun shining: slight motion in the atmosphere.
	9	5	26 95	73	6—25 87	+ 6 30	D 138	185	1000 131	17 22	4—05 71	— 4 62	D 138	185	1000 131	33 90	10 05 33	—10 26	D 138	185	1000 131	5 56	—15 78	11 66	27 44	36 14 / 1	13 90 / 1	24 20 / 1	Ditto, ditto.
	10	6	26 95	75							4—21 37	+15 66	D 185	0	1000 131	17 33	9 55 91	— 9 42	D 185	0	1000 131	0 85			16 49	22 92	54 01 / 1	46 52 / 1	Cloudy: great motion in the air.
	12	7	26 9	79							4—15 79	— 5 58	M 88	88	1000 131	22 93	9 50 99	— 4 92	M 70	88	1000 131	Negt.					22 76 / 1	304 35	Sun shining occasionally: motion of the air very great.
	2	8	26 88	78							4—10 33	— 5 46	M 12	100	1000 065	23 37	10 3 77	+12 78	M 12	100	1000 131	4 78			23 60		17 21 / 1	1	Light showers.
																											13 00 / 1	54 01	Ditto, ditto.
9th.	7 15	1	26 88	69							3—54 55			211	1000 039	44 15											8 93 / 1	1	Cloudy and hazy.
	9	2	26 88	69	6—08 53		1	31	1000 039	34 56	4—04 81	+10 26	D 123	81	1000 039	33 89	10 23 51			81	1000 039	14 65	+	19 91	16 25	11 41 / 1	11 64 / 1	17 66 / 1	Flag very faint.
	10 12	3	26 9	70	6—20 35	+11 82	D 81	+ 0	1000 065	22 74	4—14 29	+ 9 48	D 81	0	1000 039	24 41	10 17 15	— 6 36	D 81	0	1000 039	11 47	— 1 68	11 27	12 29	17 35 / 1	16 16 / 1	22 55 / 1	Cloudy: hygrometers very unsteady.
	12	4	26 9	72	6—34 51	+14 16	M 315	+ 315	1000 065	08 58	4—06 37	— 7 92	M 315	315	1000 039	32 33	10 19 55	+ 2 40	M 315	315	1000 039	12 67	—23 76	— 4 09	19 77	46 00 / 1	12 21	20 41 / 1	Heavy clouds: hygrometers very unsteady.
	2	5	26 85	69	6—16 39	—19 12	D 225	90	1000	26 70							10 11 69	— 7 86	D 225	90	1000	8 74		+17 9		14 77 / 1		29 60 / 1	Ditto, ditto.
	4	6	26 9	75	6—20 35	+ 4 16	0	90	1000 065	22 74							10 10 35	— 0 84	0	90	1000 065	32		14 42		17 35 / 1		31 09 / 1	Light showers.
	5	7	26 9	73	6—04 57	—15 78	M 28	+ 367	1000 065	38 52							10 23 51	+12 66	M 277	+ 367	1000 065	11 60		23 89		10 24 / 1		18 43 / 1	Cloudy.
	5 45	8	26 9	73	5—55 15	— 9 42	M 128	495	1000 065	47 94							10 28 19	+ 4 68	M 128	495	1000 065	16 99		31 96		8 23 / 1		15 23 / 1	Cloudy.
	6	9	27	72	6—00 67	+ 5 42	M 15	510	1000 202	42 42							10 10 61	—17 58	M 15	510	1000 202	8 21		34 21		9 30 / 1	1	31 51 / 1	Foggy: sun shining occasionally.
11th.	6	1	27	68	5—53 53			+ 256	1000 202	49 56	3—50 65			256	1000 202	48 05	10 19 67			256	1000 202	12 74	+ 1 51	36 82	35 41	7 96 / 1	8 19 / 1	20 31 / 1	Sun shining: hygrometers extremely unsteady.
	8	2	27	70	6—16 39	+22 86	D 248	28	1000 202	26 70	4—05 59	+ 4 94	D 248	28	1000 202	33 11	10 11 79	— 7 89	D 248	28	1000 202	8 79	— 6 41	17 91	24 42	14 78 / 1	11 93 / 1	29 43 / 1	Ditto, ditto.
	9 33	3	27 05	73	6—26 65	+ 9 26	D 28	0	1000 271	16 44	4—15 85	+10 26	D 28	0	1000 271	22 85	10 07 06	— 4 73	D 28	0	1000 271	6 43	— 6 44	10 01	16 42	24 00 / 1	17 27 / 1	40 43	Cloudy: a good deal of motion in the atmosphere.
	10 37	4	27 05	75	6—18 79	— 7 86	M 232	+ 232	1000 271	24 30	4—15 85	0	M 232	+ 232	1000 271	22 85	10 09 43	+ 2 37	M 232	+ 232	1000 271	7 61	+ 1 45	16 69	15 24	16 23 / 1	7 27 / 1	1	Motion in the atmosphere moderate.
	12	5	27 05	76	6—39 68	+20 89	D 168	64	1000 271	3 41	4—26 11	+10 26	D 168	+ 64	1000 371	12 59	10 02 33	— 7 10	D 168	64	1000 271	4 06	— 9 18	— 0 65	8 51	115 73 / 1	31 34 / 1	63 71	Motion in the atmosphere very considerable.
	2	6	27	81						13 26	4—28 45	+ 2 34	D 30	34	1000 202	10 25	9 48 15	—14 18	D 30	34	1000 202	Negt.	+ 3 01			29 76 / 1	38 50 / 1	1	Motion in the air a little abated: squalls.
	4	7	27	81	6—29 83			136	1000 202	13 26	4—10 35	—18 12	M 102	+ 136	1000 202	28 37	10 08 64	+20 49	M 102	136	1000 202	7 22	—15 11	+ 6 04	21 15	29 76 / 1	13 91	35 83 / 1	Squalls all about: atmosphere very still.
	5 33	8	27	75	6—03 51	—21 32	M 180	316	1000 202	34 58	‡			‡		‡	10 22 82	+14 18	M 80	316	1000 202	14 31		20 27		11 91 / 1	1	18 07 / 1	Atmosphere very still: cloudy.
12th.	6 40	1	27	69	6—03 03			412	1000 202	40 06	4—30 85			412	1000 202	37 85	10 20 48	— 1 34		412	1000 202	13 13	+ 2 21	26 93	24 72	9 85 / 1	10 42 / 1	19 70 / 1	Ditto, ditto.
	7	2	27 05	69	6—06 97	+ 3 94	0	412	1000 271	36 12	4—03 25	+ 2 40	0	412	1000 271	35 45	10 19 67	— 0 81		412	1000 271	12 74	+ 0 67	23 36	22 71	10 92	11 10 / 1	20 31 / 1	Ditto, ditto.
	9	3	27 05	71							4—17 41	+14 66	D 42	370	1000 271	21 29	0 13 37	— 4 30	D 42	370	1000 271	9 08			12 21		18 53 / 1	28 48 / 1	Ditto, ditto.
	10	4	27 05	73							4—22 45	+ 5 04	D 255	115	1000 271	10 25	9 56 03	—17 34	D 255	115	1000 271	0 91			9 34		38 50 / 1	284 28 / 1	Great motion in the atmosphere.
	12	5	27 05	76							4—14 29	— 8 16	M 85	200	1000 271	24 4	10 08 63	+12 60	M 85	200	1000 271	2 22			22 19		16 16 / 1	116 53 / 1	Ditto, ditto, ditto.
	2	6	27	81 5							4—22 93	+11 64	D 120	80	1000 202	15 77	9 56 03	—12 60	D 120	80	1000 202	0 91			14 86		25 02 / 1	284 28 / 1	Motion of the atmosphere very great.
	4	7	27 95	82	6—32 98			0	1000 131	10 11	4—09 55	—13 38	D 80	0	1000 131	29 15	10 13 37	+17 27	D 80	0	1000 131	9 08	—19 04	1 03	20 07	1			Squalls all about: sun shining occasionally.
	5	8	27	79	6—15 64	—17 34	M 70	70	1000 202	27 45	4—09 55	0	M 70	70	1000 202	29 15	10 19 67	+ 6 30	M 70	70	1000 202	12 74	— 1 70	14 71	16 41	39 03 / 1	13 53 / 1	28 48 / 1	Ditto, ditto.
	6	9	27	78	6—03 03	—12 61	M 180	250	1000 202	40 06	3—57 73	—11 82	M 180	250	1000 202	40 79	0 27 55	+ 7 88	M 180	250	1000 202	10 67	— 0 91	23 39	24 30	14 37 / 1	13 53 / 1	20 31 / 1	Atmosphere very still: heavy clouds all about.
																										9 85	9 63	15 51	

Month and days.	Time of observation.	Number of ditto.	Barometer.	Thermometer.	*Depression of Foot of Flag-Staff S. Ext. of Line.* Depressions reduced.	Difference.	Difference of moisture and dryness.	Absolute degree of moisture.	Increase or decrease of density in the air.	Refraction.	*Depression of Top of Flag-Staff S. Ext. of Line.* Depressions reduced.	Difference.	Difference of moisture and dryness.	Absolute degree of moisture.	Increase or decrease of density in the air.	Refraction.	*Elevation of Foot of Muntapun.* Elevations reduced.	Difference.	Difference of moisture and dryness.	Absolute degree of moisture.	Increase or decrease of density in the air.	Refraction.	*Refractions compared.* Foot of flag-staff + than top.	Foot of flag-staff + than Muntapun.	Top of flag-staff + than Muntapun.	*Ratio of Refraction to the contained Arc.* Foot of flag-staff.	Top of flag-staff.	Muntapun.	REMARKS.
13th.	6	1	27 05	71	5—53 53 §			496 §	1000 271	49 56 §	4—1 63 §			496 §	1000 271	37 07 §	10 27 55 §	—11 82	D 82	496 §	1000 271	16 67 §	+12 49	+32 89	+20 40	1 / 7 96	1 / 10 64	1 / 51 51	Cloudy.
	7 45	2	27 05	72	6—20 37 §	+26 84	D 82	414 §	1000 271	22 72 §	4—12 67 §	+11 04	D 82	414 §	1000 271	26 02 §	10 15 73 §	—11 03	D 167	414 §	1000 271	10 76 §	— 3 26	11 96	15 27	1 / 17 37	1 / 15 16	1 / 24 04	Slight motion in the atmosphere.
	9	3	27 05	73							4—27 25 §	+16 56	D 167	247 §	1000 271	9 47 §	10 04 70 §	— 8 62	D 42	247 §	1000 271	5 24 §			4 23 §		1 / 41 67	1 / 49 37	Motion in the atmosphere.
	9 45	4	27	75							5—37 14 §	+ 7 91	D 42	205 §	1000 202	1 56 §	9 56 03 §	—13 63	D 70 §	205 §	1000 202	0 91 §			0 65		1 / 252 99	1 / 284 28	Flag very faint: great motion in the atmosphere.
	11	5	27	79													9 42 40 §	+20 8	M 15 §	135 §	1000 202	Negative. §							Sun shining.
	12	6	27	79													10 03 12 §	—23 72	D 95 §	150 §	1000 202	4 46 §						1 / 58 00	Motion in the atmosphere considerable: sun shining.
	2	7	27	83													9 39 48 §	—54 58	D 55 §	55 §	1000 202	Negt. §							Sun shining bright: light clouds.
	4	8	27	85	6—19 57 §	— 9 48	M 15 §	0 §	1000 202	23 52 §	4—14 29 §	—13 44	M 15 §	0 §	1000 202	24 41 §	8 45 90 §	+33 77	M 15 §	0 §	1000 202	Negt. §	— 0 89			1 / 16 78	1 / 16 16		Hazy light clouds: motion in the atmosphere abated.
	5 16	9	27	84	6—10 09 §	— 7 06	M 15 §	15 §	1000 202	33 00 §	4—00 85 §	— 7 05	M 15 §	15 §	1000 202	37 85 §	10 19 67 §	+ 1 53	0 §	15 §	1000 202	12 74 §	— 4 85	20 26	25 11	1 / 11 96	1 / 10 42	1 / 20 31	Motion in the air much abated.
	5 30	10	26 85	84	6—03 03 §	—14 18	M 15 §	15 §	1000	40 06 §	3—53 80 §	— 6 36	M 15 §	15 §	1000	44 90 §	10 21 25 §	+ 8 45	M 15 §	15 §	1000	13 52 §	— 3 84	26 54	32 39	1 / 9 85	1 / 8 76	1 / 19 13	Sun shining: atmosphere very still.
	6	11	26 9	82	5—48 85 §			30 §	1000 065	51 24 §	3—47 49 §			30 §	1000 065	57 21 §	10 30 70 §			30 §	1000 065	18 24 §	— 5 97	33	38 97	1 / 7 70	1 / 6 89	1 / 14 19	Sun shining.
14th.	6	1	26 95	70							3—42 77 §			507 §	1000 131	55 93 §	10 21 25 §	—11 82	D 134 §	507 §	1000 131	13 52 §			42 41	1 / 13 74	1 / 7 05	1 / 19 33	Sun shining occasionally: flag very faint.
	8 30	2	26 95	73	5—48 85 §	+19 78	D 7 §	373 §	1000 131	54 24 §	4—11 13 §	+22 36	D 7 §	373 §	1000 131	7 57 §	10 09 43 §	— 5 52	D 7 §	373 §	1000 131	07 61 §	+ 6 67	47 63	19 96	1 / 7 27	1 / 14 31	1 / 34 00	Flag very faint: sun shining.
	9 12	3	26 95	76	6—48 63 §			366 §	1000 131	38 46 §	4—33 99 §			366 §	1000 131	4 74 §	10 03 91 §	—15 76	D 42 §	36 §	1000 131	4 85 §	+33 75	33 61	0 14	1 / 10 26	1 / 83 79	1 / 53 34	Sun shining.
	10	4	27	76													9 48 15 §	— 3 15	D 110 §	324 §	1000 202	Negt. §							Great motion in the atmosphere: sun shining.
	12	5	27	83													8 45 00 §		D 175 §	214 §	1000 202	Negt. §							Ditto, ditto.
	2	6	26 9	84													9 56 82 §			39 §	1000 065	1 30 §						1 / 199	Sun shining.
	2 25	7	26 9	85													9 54 45 §	— 2 37	D 27 §	12 §	1000 065	0 12 §						1 / 215 58	Motion in the atmosphere.
	3	8	26 9	85													9 59 18 * §	+ 4 73 *	D 12 *	0 §	1000 065	2 48 §						1 / 104 31	Ditto, ditto.
	4	9	26 9	84	6—25 87 §	—14 96	M 7 §	2 §	1000 065	17 22 §	4—27 69 §	—29 96	M 7 §	2 §	1000 065	11 01 §	10 00 76 §	+ 1 55	M 2 §	2 §	1000 065	3 27 §	+ 6 21	13 95	7 74	1 / 22 90	1 / 35 64	1 / 79 11	Light clouds.
	5 30	10	26 9	83	6—10 91 §	— 6 28	M 71 §	9 §	1000 131	32 18 §	3—57 73 §	— 7 08	M 71 §	9 §	1000 131	49 97 §	10 22 83 §	+22 07	M 7 §	9 §	1000 131	14 31 §	— 7 79	17 87	26 65	1 / 12 26	1 / 9 63	1 / 18 07	Ditto, ditto.
	5 30	11	27	81	6—04 63 §	— 9 48	M 12 §	80 §	1000 202	38 40 §	3—50 65 §	— 1 62	M 12 §	80 §	1000 202	48 05 §	10 27 55 §	+ 4 72 *	M 71 *	80 §	1000 202	16 67 §	— 9 59	21 79	31 40	1 / 10 26	1 / 8 21	1 / 15 52	Ditto, ditto.
	6	12	26 95	81	5—55 15 §			92 §	1000 131	47 94 §	3—49 03 §			92 §	1000 131	49 67 §	10 25 91 + 10 22 85 §	— 1 56 *	M 12 *	92 §	1000 131	15 88 + 14 31 §	— 1 73	32 06	33 79	1 / 8 25	1 / 7 94	1 / 16 29	Ditto, ditto.
15th.	6	1	27	69							3—56 1 §			450 §	1000 202	42 53 §		— 8 68	D 112 §	459 §	1000 202				28 22		1 / 9 28	1 / 18 07	Cloudy.
	7	2	27	71							3—57 83 §	+ 1 56	D 112 §	54 §	1000 202	0 97 §	10 14 15 §	— 5 51	D 70 §	347 §	1000 202	9 97 §			31 00		1 / 9 63	1 / 25 94	Ditto.
	8	3	27	73							4—15 85 §	+13 12	D 70 §	276 §	1000 202	2 85 §	10 08 64 §	— 5 52	D 50 §	27 §	1000 202	7 21 §			15 64		1 / 17 27	1 / 35 68	Sun shining: cloudy.
	9	4	27	75							4—27 69 §	+11 84	D 50 §	227 §	1000 202	11 01 §	10 03 12 §	—12 6	D 32 §	227 §	1000 202	4 45 §			6 56		1 / 35 84	1 / 58 13	Cloudy: sun shining: motion in the atmosphere.
	11	5	27 05	76							4—33 90 §	+ 6 3	D 32 §	10 §	1000 271	34 71 §	9 50 5 §	— 0 79	M 27 §	195 §	1000 271	Negt. §					1 / 83 79		Sun shining: great motion in the atmosphere.
	12	6	27	81													9 51 30 §	+12 61	D 142 §	222 §	1000 202	Negt. §							Ditto, ditto.
	12 45	7	27	82													10 03 91 §	— 0 79 *	D 75 *	80 §	1000 202	4 85 §						1 / 53 34	Sun shining.
	2	8	26 95	84							4—33 99 + §	—24 58	0	5 §	1000 131	4 71 + §	10 03 14 *	+13 40	0 *	5 §	1000 131	4 45 §			0 26		1 / 83 79	1 / 58 13	Motion in the atmosphere moderate: flag extremely faint.
	4	9	26 95	83	6—10 91 + §			5 §	1000 131	32 18 + §	4—9 41 + §	— 3 24 *	D 5 *	5 §	1000 131	29 29 + §	10 16 50 + 10 22 03 *	+ 5 51 *	D 5 *	5 §	1000 131	11 15 + §	+ 2 89	21 03	18 14	1 / 12 26	1 / 13 47	1 / 23 20	Sun shining: clondy.
	5	10	26 9	82	6—16 39 §	+ 5 48	D 5 §	0 §	1000 065	26 70 §	3—56 17 §	— 2 34 *	M 14 *	0 §	1000 065	42 53 §		— 0 78 *	M 14 *	0 §	1000 065	13 91 §	—15 83	12 79	26 62	1 / 14 77	1 / 9 28	1 / 18 69	Hygrometers very unsteady.
	5 35	11	26 95	82	6—14 05 §	— 3 11	M 20 §	14 §	1000 065	29 01 §	3—55 38 §	— 4 73 *	M 20 *	14 §	1000 065	43 32 §	10 21 25 §	+12 36 *	M 110 *	14 §	1000 065	13 52 §	—14 28	15 52	29 80	1 / 13 58	1 / 9 11	1 / 19 13	Sun shining.
	6	12	27 05	81	6—10 91 §			34 §	1000 271	32 18 §	3—50 65 §			34 §	1000 271	48 05 §	10 33 61 §			34 §	1000 271	19 70 §	—15 87	12 48	38 35	1 / 12 26	1 / 8 21	1 / 13 13	Cloudy.
15th.	6	1	27	71	6—6 97 §			68 7 §	1000 202	36 12 §	3—51 44 §			687 §	1000 202	47 26 §	10 21 25 §			687 §	1000 202	13 52 §	—11 14	22 60	33 74	1 / 10 92	1 / 8 35	1 / 19 13	Ditto.
	7	2	27	72	6—24 21 §	+14 24	D 27 §	660 §	1000 202	14 88 §	4—09 50 §	+17 97	D 27 §	660 §	1000 202	29 29 §	10 15 73 §	— 5 52	D 27 §	660 §	1000 271	10 76 §	—14 41	4 12	18 53	1 / 26 52	1 / 13 47	1 / 24 04	Cloudy: sun shining.
	8	3	27 05	74							4—09 55 §	+ 0 14	D 50 §	610 §	1000 271	29 15 §	10 00 76 §	+ 4 97	D 50 §	610 §	1000 271	3 27 §			25 88		1 / 13 54	1 / 79 11	Ditto, ditto.
	9	4	27 05	78							4—22 15 §	+12 60	D 190 §	420 §	1000 271	16 53 §	9 59 18 §	— 1 58	D 190 §	420 §	1000 271	2 48 §			14 05		1 / 23 87	1 / 104 31	Cloudy: sun shining: motion in the atmosphere.
	10	5	27 05	78							4—30 05 §	+ 7 90	D 80 §	340 §	1000 271	8 05 §	9 54 45 §	— 4 68	D 80 §	340 §	1000 271	0 12 §			8 53		1 / 45 63	1 / 215 58	Flag extremely faint: sun shining.
	12	6	27	83													9 48 15 §	— 6 30	D 210 §	130 §	1000 202	Negt. §							Motion in the atmosphere: light clouds.
	2	7	27	84													9 42 65 §	— 5 50	D 65 §	65 §	1000 202	Negt. §							Sun shining: cloudy.
	4	8	26 95	83	6—10 91 + §			0 §	1000 131	32 18 + §	4—08 85 §			0 §	1000 131	37 25 §	10 09 43 §	+28 78 *	D 65 *	0 §	1000 131	7 61 §	— 5 07	24 51	29 65	1 /	1 /	1 /	Cloudy.
	5	9	26 95	82	6—56 74 *	+45 83 *	M 95 *	95 §	1000 131	46 35 §	3—56 95 §	—11 90	M 95 §	95 §	1000 131	41 75 §	10 22 03 §	+12 60	M 95 §	95 §	1000 131	13 91 §	+ 4 60	32 44	27 74	1 / 12 26	1 / 10 59	1 / 34 00	Ditto.
	6	10	26 95	81	5—55 53 + §	— 3 21	M 10 §	105 §	1000 131	49 56 + §	3—46 51 §	—10 24	M 10 §	105 §	1000 131	51 99 §	10 53 61 §	+11 58	M 10 §	105 §	1000 131	19 70 §	— 2 43	29 86	32 29	1 / 8 51	1 / 9 45	1 / 18 69	Sun shining: cloudy.
																											1 / 7 58	1 / 13 13	

N. B. Where the refraction is said to be negative, as frequently occurs in observations of the Muntapun, it is only meant to state, that, from various causes the angle of elevation was taken too small; and from this inaccuracy, a result equally defective has ensued. These observations have been preserved, as an instance of the very small quantity of refraction, prevailing, at the time when they were taken.

TRANSACTIONS

OF THE

ASIATIC SOCIETY.

I.

An account of Experiments made in the MYSORE COUNTRY, *in the year* 1804, *to investigate the effects of Terrestrial Refraction.*

BY LIEUTENANT JOHN WARREN,

Of H. M. 33d Regiment of Foot.

INTRODUCTION.

NOTWITHSTANDING the various theories which have been advanced, at different times, to account for the effects of refraction*; and the numerous experiments which have been made by the most eminent philosophers of our times, with a view to discover some law by which its effects might be reduced to certain narrow limits, applicable to practice, nothing sufficiently satisfactory has yet occurred to set the question finally to rest.

The late GENARAL ROY was the first among us, who availed himself of the favorable opportunity which his survey presented, to pay some minute at-

* Particularly by DE CARTES, LEIBNITZ, the two BERNOUILLIS, and lastly by SIR ISAAC NEWTON, whose hypothesis, grounded on the laws of attraction, now generally obtains among physical writers.

tention to the effects of terrestrial refraction. After him COLONEL WILLIAMS and Mr. DALBY resumed the investigation, as far as the service on which they were employed conveniently allowed: but as this was but a secondary object with them, little additional information is to be gathered from their labours. MAJOR MUDGE has, indeed, made a number of experiments since that time; but the result has fallen so far short of his expectations, that he promises, in his latest publication, to resume and pay particular attention to the subject: and we have no doubt every right to expect something very valuable from that quarter. But, may not the laws of refraction be so materially affected by gravity, and other unknown causes, as to vary in different parts of the globe, and that theory which obtains in high northern latitudes fail in tropical regions? indeed, the irregularities which of late have been detected in the declinations of certain stars *, which, though unobserved in *England*, are powerfully felt in these climates, sufficiently show how much we have reason to suspect an

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* MAJOR LAMBTON, in a postscript to one of his late reports to government, has this observation. "We find here, that different stars "give very different latitudes after being corrected for aberration, "nutation, &c. At *Trivandeporum*, the latitude of that station by "*Aldebaran* was 11° 44′ 52″ 59. The latitude by *Regulus* was "11° 44′ 47″ 84, and the latitude by αOrionis, 11° 44′ 40″ 91. I had "made observations by the same three stars at *Paudree* station, where "those by *Regulus* and αOrionis were often interrupted on account of "the bad weather, and consequently left doubtful: but the differences "notwithstanding were *nearly the same*, &c. Though these observations have been set aside, they serve sufficiently to prove that the "declinations, as laid down in *Europe*, are irregular *here*, and this "may probably arise from the uncertainty we labour under with respect to the laws of refraction; and in consequence of erring in "that, the difference of the corrected zenith distances of two stars "observed in *Europe*, will *not* be the same as the difference which "the same stars will give in this latitude. I am, however, hazarding "an opinion, but as I intend, being more satisfied as to the *fact*, I "hope I shall be able to say more on the subject hereafter."

effect of the sort, and must evince the expediency of obtaining corresponding experiments in different latitudes; for, it is obvious, that even to ascertain any deviation in a system, perhaps too generalised, might be attended with incalculable advantages to science.

It must be owned, that to render experiments on terrestrial refraction pointedly useful, it would be necessary to shew how discoveries in this province might apply and be extended to refraction in general. Hitherto, on this recondite subject, nothing which would immediately apply has reached my knowledge; but as so much is still to be done whenever refraction is concerned, we may argue, that, in the present stage of our information, observations confined to terrestrial objects may be deemed sufficient.

It has been stated on experiments*, that the refractive power of the air is proportional to its density; and this is as its weight directly, and heat inversely. It would then appear, were our barometers and thermometers, sufficiently accurate, that by comparing them at any given time, the ratio of its density might be had. But it has been found, on trial, that in the present unimproved state of these instruments, changes, not very minute, in the density of the atmosphere, escape our notice, when a reference is made to them alone.

Now, since we have every reason to suppose, that whatever share, heat, cold, or electricity, may have separately on the refractive powers of the air †, their

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* By HALLEY.

† EULER, after a number of experiments on the immediate effects of heat and cold, on the refractive powers of media, concludes, "that, "in all translucent substances, the focal distances diminish with the "heat, which diminution, he conceives, is owing to a change in the

effect is extremely inconsiderable, when compared with that caused by the bulk of water contained in dissolution in the atmosphere: we may, therefore, in the present inquiry, consider them merely as agents, composing and decomposing perpetually the air; and neglect the consideration of that immediate effect which SMITH and EULER have ascribed to them. Should we then succeed, in ascertaining, with any degree of accuracy, the relative degree of moisture and dryness, at the different times of observation, we shall (without neglecting other considerations) lay more stress on these results, than on what might be deduced separately from observations of the barometer and thermometer.

Before entering into the subject of experiments, it will be proper to preface a few words on the motives which induced me to attend particularly to the effects of terrestrial refraction, at the time that I did; as it will afford an opportunity of giving an account of the data on which I chiefly proceeded.

Having received directions from MAJOR LAMBTON *, to measure a line near *Bangalore*, to serve as a base of verification to the trigonometrical operations which were then carried on under his superintendance, it occurred to me, when this service was completed, that so favourable an opportunity was not likely to recur, for entering minutely into the subject; for every possible means had been taken, to insure as accurate a measurement as could be effected: and this line, together with the elevation of one of

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" refractive power of the substance itself; which probably increases " by heat, and diminishes by cold."

But this applies chiefly to hard media, such as glass lenses, &c. &c. and may be deemed (for the present) too inconsiderable to require particular notice, where air is the medium.

* Whose assistant I then was.

its extremities above the other, (ascertained in the course of the measurement) afforded every necessary datum to proceed on in this investigation.

As the detailed account of the abovementioned operation will appear at full length in MAJOR LAMBTON's reports, and cannot with propriety be given in this paper, I hope that its being known to form a part of the trigonometrical operations, carried on in the peninsula of *India*, will appear a sufficient pledge of its accuracy.

ACCOUNT OF INSTRUMENTS.

The elevations and depressions were taken with the great theodolite, used by MAJOR LAMBTON, for carrying on his series of primary triangles across the peninsula. This instrument, having been formerly described by himself, need not be any further particularised. The angles were invariably taken with the micrometer in the focus of the telescope.

A barometer and thermometer were also procured*; but from the reasons above given, the want of an hygrometer was likely to deprive me of what I considered to be an essential means of investigation (though I cannot find that such an instrument was ever applied to a similar purpose) when LIEUTENANT KATER, of H. M. 12th regiment, communicated to me his observation, on the bearded seeds of a wild grass, called in the Malabar tongue *Panimooloo* (the *Andropogon contortum* of LINNÆUS) which grows in abundance in this part of the peninsula, and which he thought was likely to answer for an instrument of this sort †.

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* The barometer was a common one, the property of Dr. HEYNE, the company's naturalist. The thermometer, one of Fahrenheit's division.

† The beards of the wild oats have been used in *England* for a similar purpose (see HUTTON's Dictionary, art. *Hygrometer*).

Although I understand it to be this gentleman's intention to give an account of his experiments on these fibres to the public; yet, as his official calls prevented him from going minutely into the subject, at the period when I had occasion for an hygrometer, I was under the necessity of anticipating his intended investigation; and the experiments detailed in the appendix will shew, that after an ample trial, the beards of the *Panimooloo* grass were found perfectly competent to the construction of an hygrometer. Three of these instruments were therefore constructed, and the mean of their readings noticed in the annexed tables.

EXPLANATION OF THE TABLES.

The detail of experiments on the effects of terrestrial refraction, together with the immediate results deduced from them, appear in these tables, under the appropriate columns; and a reference to them will best explain their arrangements.

It is however necessary to explain the meaning of certain marks, which appear at various places under the figures, and which have been adopted both for the sake of perspicuity and brevity.

I soon perceived, after collecting a certain number of observations, the prevailing agreement between the motions of the hygrometer, and the variations, which occurred in the observed angles of elevation and depression.

This being a novel and interesting fact (of which I had still more reason to be convinced, after I had succeeded in regulating the hygrometers) I was desirous to draw the attention on this coincidence, and with this view the marks alluded to were affixed.

Taking it for granted (as perhaps the present experiments will be deemed to allow) that where the moisture of the atmosphere is greatest, the refraction at that moment is also greatest (and *vice versa*) wherever, in the annexed tables, the observation rigorously agrees with this theory, the mark (§) is placed underneath*; where the coincidence of moisture and refraction is not absolutely exact, the approximation is pointed out by a cross †‡, shewing, by the number of its bars, how near it comes to perfect consistency.

With a view to draw the attention still closer to the effects of moisture on refraction, two columns of differences, which were kept at the time of observation, have been preserved. The column which relates to the angles being marked $\pm$, according as these have been measured greater or less, at the two nearest observations; and that of the contemporaneous relative moisture being marked M, or D, according as the atmosphere had changed from a moister to a drier state, and *vice versa*.

As this coincidence has been very general, I found

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* It is to be noticed, however, that morning and evening observations are compared separately, neglecting those taken in the middle of the day; for these, from the great motion which then disturbs the atmosphere, must necessarily be very imperfect. The only reason why these observations are not left out altogether, is, that however imperfect they may be, as to a second or two, they contribute nevertheless to establish the proof of the relation of moisture to refraction; for it is to be observed, that (when the weather is perfectly clear of rainy clouds) the refraction is never so inconsiderable as in the heat of noon, when the sun shines brightest, and when the tremor of the atmosphere is most considerable: and the reason of this seems to be, "because the atmosphere, however disturbed, "is then generally in its driest state." There was so little refraction at that hour, that the elevations of the *Muntapum* frequently bring it out *negative;* an absurdity which arises both from the impossibility of taking the angles accurately, and the very small refraction then prevailing.

the shortest way was to mark with an asterisk (*) those cases where it had failed; and by inspecting the tables, it will appear that the number of these is comparatively small.

The quantity of refraction, as entered in the appropriate columns, has been computed, according to those respective cases of depression or elevation, founded on reasonings too generally known to require any minute explanation.

It will only be necessary to state, that, with regard to the measured line, the formula $r = \frac{1}{2} A - D + a$* has been used in preference to that of $r = \frac{A-(D+D')}{2}$, for the obvious reason, that a greater reliance was to be placed on the perpendicular depression, obtained during the process of measurement, than on corresponding angular depressions, taken at the S. end of the base line, even though an equal number of observations had been taken at each end.

The refraction, affecting the elevation of the *Muntapum* †, was necessarily computed by means of the elevations and depressions, taken at both places respectively, $r = \frac{A-(D-E)}{2}$ being the appropriate formula, where E expresses the elevation, and is less than D.

An example of each will suffice to render the subject perfectly clear.

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* Where $r =$ Refraction.
$\frac{1}{2} A =$ One half the contained arc.
$D =$ The greater depression.
$D' =$ The less depression.
And $a =$ The angle subtended by the perpendicular depression of S. end of measured line.

† A small stone building, on a very conspicuous rising ground, about four miles N. of *Bangalore*.

EXAMPLE I.

The length of the measured line (*Banswary* and *Beygoor*) being converted into an arc of a great circle, gives $6' 34.''67 = A$ *.

Again, the depression of the south extremity of the line (near *Beygoor*) below the level of the northern one, is 39. 7 feet, and using the proportion of radius to tangent, we have for the angle which it subtends $3' 25.''75 = a$.

Lastly, on the 7th of August, at $6^h \cdot 39'$ A. M. the depression of the foot of the flag-staff near *Beygoor*, was observed at *Banswary*, $6' 42'' 66$.

But the height of the observer's eye above the ground was 5. 67 feet (that of the instrument) which to reduce to the ground, will require $29'' 39$ to subtract: consequently, the corrected depression will be $6' 13''. 27 = D$ (the quantity entered in the tables). Whence

$\frac{1}{2} A =$	$3'$	$17''$	34
$+ a =$	3	25	75
	6	43	09
$-D =$	6	13	27
$r =$		29	82

The refraction entered in the tables.

* The horizontal length of the measured line is 39799, 31 feet; and when reduced to the level of the sea, = 39793, 7. This length has been used, in this particular case, to obtain the contained arc; because the tables, by means of which the operation was performed, were calculated to that distance from the centre of the earth.

EXAMPLE II.

At the same hour, the top of the flag-staff was observed 4′ 37.″ 32; which, corrected for the height of the instrument, as above, gives the depression 4′ 07″ 93=*D*. Again, the length of the flag-staff being 24 feet, this subtracted from 39. 7, leaves the perpendicular depression below the line of the level 15. 7 feet; and the angle which it subtends=1′ 21″ 36=*a*.

Hence we have,

$\frac{1}{2}$ *A*=	3′	17″	34
+ *a*=	1	21	36
	4	38	70
− *D*=	4	7	93
r=	0	30	77

The refraction entered in the tables.

EXAMPLE III.

1st. The distance from the N. extremity of the line *(Banswary)* to the *Muntapum* is 26327. 3, which, converted into an arc of a great circle, is 4′ 18″ 7=*A*.

2d. Again, the elevation of the *Muntapum* was taken at *Banswary* (on the same day 8$^{h.}$ 17″ A. M.) 9′ 21″ 84, and this corrected for the height of the instrument (by adding 44″ 43), makes the elevation 10′-6″ 27=*E*.

3d. Lastly, in the beginning of August, during the afternoon, being at the *Muntapum*, the depression of N. end of line was observed, on a mean of four obser-

vations, to be 15′ 19″ 5, and the instrument (in the *Muntapum*) being 8, 5 feet above the ground, we have to subtract 1′ 6″ 59, which reduces the depression to 14′ 12″ 91=D, a constant quantity in computing the third column of refraction.

Hence we have,

D=	14′	12″	91
—E=	10	06	27
	4	06	64
A=	4	18	7
2)	0	12	06
r=		06	03

The refraction entered in the tables.

The absolute degree of moisture was deduced as follows:

As I knew of no standard, by which I might set the hygrometer, when I was about observing, the least degree of moisture noticed during the day was assumed as zero. This arrangement had this advantage, that the refraction and moisture had a similar direction, and their coincidence met the eye more easily.

The column which shews the absolute density of the atmosphere was computed by this formula:

$D=(B-B')\times\frac{9600\,d}{9600}\times\overline{1-\frac{n}{435}}$ * founded on rea-

* Where D expresses the increase of density, B the height of barometer at the time of observation, B' the state of the same when lowest of all, n the difference of temperature in the air, and d the difference of temperature in the mercury.

sonings sufficiently known. An example, however, may not be deemed superfluous.

EXAMPLE.

The lowest degree to which the barometer descended during the course of these experiments, was 26. 85 inches$=B'$, when the temperature also least of all was 69°. These two quantities are used as constant in the computations.

Now, on the 7th of August, at 6^{h}. 39′ A. M. the barometer was oberved to be at $27=B$
from which deduct $26\ 85=B'$

there remains, $0\ 15=B-B'$

Again, the thermometer at the same time was $75°$
from which deduct 69

and we have $6=n$; and as no difference of temperature was noticed in the atmosphere and mercury, the same quantity (6) will also be expressed by d.

Hence it is that having found,
$B-B=0.\ 15$; $\frac{9600-d}{9600}=0.\ 99$, &c.; and $\frac{435-n}{435}=0.\ 98$, &c. we have $0.\ 15 \times 0.\ 99 \times 0.\ 98 = 0.\ 145530$; which to reduce in terms of B (the least density) we have $\frac{26\ 85}{0\cdot 145530}=\frac{1}{184}$ the increase of density.

Lastly, to obtain an expression in absolute numbers, we have, as $26.\ 85 : 26.\ 85+\frac{1}{184} :: 1000 : 1000.\ 202$, the quantity entered in the tables.

The remaining columns are sufficiently explicit to require no explanation.

REMARKS ON THE RESULTS.

1st. The most remarkable fact, which calls for our attention, in the results of the present experiments, is the almost invariable coincidence of the increase of refraction with that of moisture; which will appear still more forcibly, if we consider the results of the following eight observations, all taken between 10 and 12 o'clock, P.M. on different nights, when I was engaged in observing the eastern elongation of the polar star; the depression of the S. extremity of the line being taken by means of a referring lamp.

Days.	Depressions.			Refraction.		
Augt.						
7	5′	17″	33	1′	25″	76
10	5	36	24	1	6	85
11	5	40	18	1	2	91
12	5	49	64	0	53	45
13	5	51	21	0	51	88
14	5	54	36	0	48	72
15	5	23	63	1	19	46
16	5	40	97	1	2	12

Mean refraction 1′ 1″ 38.

On comparing the hygrometers, as they stood at the time of these observations, with their position when last noticed in the day time, it was found that they had revolved, on a mean, 240° in the direction of moisture. Now, the mean refraction of 55 observations, noticed in the tables, is 29″ 74; and we have seen that of the 8 observations taken at night (which, from the stillness of the air, may be deemed to balance a superior number) to be 1′ 1″ 38. Hence, it will appear, that the latter is something more than double the former.

2d. We shall next advert to the comparative quan-

tity of refraction, which seems to have affected the observations of the different objects referred to in the tables; and here, it is perhaps worthy of notice, that out of 49 contemporaneous observations, of the top and foot of the flag-staff, at the S. extremity of the line, the refraction attending those of the foot are 36 repeated times *less* than those of the top; and that, in the 13 remaining ones, where the contrary occurs, the excess is seldom above 2″ of refraction, and frequently below unity *. As this circumstance is in opposition to the general theory, "that the lower the object, the greater the refraction," should the same circumstance occur again, in future experiments, it will be worth while to inquire, whether the rays, when passing through the atmosphere below the line of the level, may not be refracted differently from what they are when passing above it. This may perhaps be thought better than a mere conjecture, if it be recollected, that Mr. Bouguer, (whilst employed in measuring a degree of the meridian in *South America*, and observing on the summit of the *Cordeliers*) noticed a sudden increase of refraction, when he could view the stars below the line of the level.

3d. With regard to any attempt towards estimating the effects of terrestrial refraction, by an assumed ratio to the contained arc, as has been hitherto the practice; without entering into any discussion of the subject, I shall only observe, that if, in the foregoing experiments, we go by the observations taken in the day time, we shall have (considering the foot of flag-staff, and preserving the same notation) $r = \frac{1}{13 \cdot 27}$;

* The mean difference of refraction, between the top of the flag-staff and the *Muntapum*, (on 38 contemporaneous observations) is 16″. 44; and that between the top of flag and *Muntapum* is 22″. 51, where the order is inverted by 6″. 07: and if the top and foot of flag-staff be compared, in an equal and contemporaneous number of observations, the mean of their difference is 6″. 08 likewise in the inverse order.

and if we take those by night, it will be $r = \frac{1}{6.42}$ of the contained arc, from which we can collect nothing.

4th. I have now only to add a few words on the comparative density of the air, at the different times of observation, such as entered in the tables; and the evident want of connection, between its changes and those in the refraction; from which we may infer, that, although in northern climates (where the mercury will rise and fall several inches in one day) observations of the barometer and thermometer may be attended to with advantage, on the contrary, in tropical countries, where (as appears in the present experiments) the variations of the mercury are hardly discernible*, those instruments will prove perfectly inefficient.

APPENDIX.

An account of Experiments on the fibres or beards of the Panimooloo *grass; containing also an account of the construction of the hygrometers, used in the preceding Experiments.*

Before I proceed to give an account of the experiments, by means of which I satisfied myself of the competency of the beards of the *Panimooloo* grass, to the object I had in view, it will be necesary to give a short description of the plant itself, or (since a botanical account of it is not here intended) of that part of the plant, which was used in the construction

* At Madras, the greatest alteration was observed 0.75 inches: and in the mean annual change 0.53. At *Banswary*, during the time of attending to the present experiments (that is about twelve days) the greatest change was 0.2: the latter place being 2970.8 feet above the level of the sea.

of the hygrometers, consulted in the preceding experiments on refraction.

The *Panimooloo* grass, which grows chiefly on mountains, and is well known to the natives, from its beards easily catching and adhering to their clothes, produces a kind of ear, somewhat resembling that of wheat. Its seed vessels shoot out long fibres, of a hardy texture, which entwist one with the other from left to right, so as to resemble, when in that state, a diminutive coir rope.

These fibres, or beards, are the part of the plant used in the construction of the hygrometers, and consequently deserve particular notice.

Each fibre shoots out, in a straight line, nearly to the length of an inch, from the seed vessel to which it adheres; then tapers off, in curls, to a very fine end, so that the former part of it can alone be used for the present purpose.

When viewed through a magnifying glass, it appears to be made up, like a rope, in broad strands, twisted from left to right; which, when water is applied (contrary to its effect on a rope) are gradually unfolded, and cause the motion of which I availed myself.

The twists, in the straight part of the stem, are from 5 to 7 in number; and these, as I have found by experiments, nearly mark the number of revolutions, of which the fibre is susceptible, by the application of moisture.

When dissected, the stem was found to be made up of two fibres, connected by a slight membrane, easily divided, and twisted round each other, until they were united in a common stalk, at the seed vessel at one end, and above the first curl at the other.

This construction readily explains why it should be easily affected by either moisture or dryness, but does not evince that heat, or other changes in the ambient air, might not likewise operate upon it in the same direction. The following experiments satisfied me, however, that moisture alone unfolded the stem.

EXPERIMENT I.

Having fixed a stem, about an inch long, with six twists in it, on a piece of wax, a slit straw was fastened at its upper end, by way of index: the whole was then placed clear of any motion of the air, in such a position as the nature of the experiments required; and a graduated circle of pasteboard was so placed about it, as to indicate the number of revolutions and degrees which the index went over.

Then, on placing my hand within an inch of the stem, the index generally moved from 5° to 10° of the circle, from *left* to *right;* and as *motion* in this direction was invariably the consequence of moisture, it was probable (but still it remained to be proved) that the *effluvia* arising from perspiration principally affected it in this case.

EXPERIMENT II.

By breathing violently on the stem, I generally brought the index round from 70° to 90° in the same direction; and it would go back to its original place as soon as let free.

This was a sufficient proof of its great sensibility; but to make sure whether moisture or heat caused it to move in the two preceding cases, I had recourse to the following:

EXPERIMENT III.

I first applied a ret-hot bar of iron, as close to the stem as could be contrived without burning it, which moved it uniformly from *right* to *left*.

Again, having prepared another stem, I applied the steam of hot water, issuing from the spout of a tea-kettle; which caused it to move, with great violence, several revolutions from *right* to *left*: which was a sufficient proof, that heat acted on this grass only in as much as it deprived it of its moisture.

I then proceeded to ascertain, whether the stem was any way regularly affected by the changes in the atmosphere; a point on which every thing depended. With this view I made up three hygrometers, on the following construction:

Three stalks were taken, of the same length and number of twists, and, being fixed at one end into a piece of wax, with an index (as above described) the whole was fixed at the bottom of so many strong tin boxes, about $2\frac{1}{2}$ inches deep, on the edge of which was placed a moveable broad pasteboard circle, graduated every 5°, and divided in the common way of 360°*. These three hygrometers were then placed together, and observed, for two successive days, at every hour of the day, from 7 o'clock in the morning to 8 in the evening; noticing at the same time both the barometer and thermometer, as the annexed tables will shew.

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* This graduation will, I trust, appear perfectly sufficient, when it is considered, that the mere effluvia arising from perspiration moved the index 88 or 108, as above mentioned.

Table, shewing the comparative rate of going of three Hygrometers.

Days and Months.	Hours.	Thermometer.	Barometer.	HYGROMETERS. No. 1.	Difference.	No. 2.	Difference.	No. 3.	Difference.	REMARKS.
5th	8	77		15				10		Light clouds, sunshines.
					5				5	
	9	78		20				15		Ditto, ditto.
					35				40	
	10	75		15				25		Ditto, light breeze.
					170				185	
	11	77		185		215		210		Sun shines.
					160		165		165	
	12	79		345		380		375		Bright sun-shine, light air.
					130		130		130	
	1	80		475		510		505		Ditto.
					110		120		105	
	2	86		585		630		610		Ditto.
					75		85		85	
	3	87		660		715		695		Ditto.
					15		25		20	
	4	82		675		740		715		Ditto.
					5		5		5	
	5	83	27	680		745		720		Squalls all about.
					95		85		110	
	6	80	27	585		660		610		Ditto, ditto.
					73		45		60	
	7	78	27	512		615		550		Cloudy.
					152				165	
	8	78	27 05	360				390		Cloudy.
					140				150	
6th	7	71	27	+220		240		240		Cloudy and windy.
					20		25		15	
	8	72	27 05	+200		215		225		Ditto, ditto.
					75		65		75	
	9	73	27 05	+125		150		150		Ditto, ditto.
					110		105		150	
	10	74	27 05	+ 15		45				Ditto, ditto.
					185		135		175	
	11	75	27	—170		— 90		—175		Ditto, ditto.
					170				175	
	12	77	27	—340				—350		Sun shining occasionally.
					165				170	
	1	79	27	505		510		520		Ditto, ditto.
					100		75		85	
	2	80	26 75	605		585		605		Ditto, ditto.
					85		125		90	
	3	81	27	520		460		515		Light clouds.
					70		105		80	
	4	81	27	590		565		595		Cloudy.
					70		100		75	
	5	81	27	660		665		670		Ditto.
					5		10		10	
	6	80	27	665		675		680		Ditto.
					35		30		45	
	7	79	27	630		645		635		Ditto.

N. B. In this table Zero is to be taken between the signs + and —.

It may, however, be proper to mention, that notwithstanding the great regularity which appears to prevail between the rates of going of these hygrometers, whenever the atmosphere was uncommonly moist, the exquisite sensibility of the stem required to be checked; for, as it would sometimes, during a heavy shower, revolve a whole revolution, it was not to be expected, that the three instruments would keep pace, whilst moving so briskly. A silk thread was therefore fastened at each end of the index, loaded with a thin plate of lead, hanging loose on the bottom of the box, so as to be dragged by the straw as it went round. By these means the instruments were easily regulated.

EXPERIMENT IV.

Application of heat, to determine the compass of the instrument.

Having fixed a stem, of six twists, in such a manner as to admit it, I brought a bar of heated iron as close to the stem as could be done, without setting fire to the apparatus; on which the index revolved, 2 revolutions and 105°, from *right* to *left*, when it became quiescent. That is, the heat of the iron affected it no longer in that direction, and was barely sufficient to keep the index from falling back.

The heated bar being withdrawn, the index began to recede, and became quiescent again (that is in its natural position) after having returned 290°.

But the three hygrometers, whose rate of going is given in the preceding table, had moved meanwhile 204° towards it; and therefore this quantity is to be added to the above.

Namely 290°
+204
—— Rev.
494=1+134°

Whence it will appear, that since the index had moved, by the application of heat, Rev. 2+105=825°
and that, by cooling, it only recovered 1+134=494

it follows, that the stem, by being deprived of its radical moisture, lost a power =331°

EXPERIMENT V.

Application of Moisture.

As soon as the index of the same stem gave signs of proceeding regularly with the hygrometers, a hair pencil, full of water, was applied, and held to the stem, when it revolved R. 6+295° from *left* to *right*, and then remained quiescent. On the pencil being withdrawn, the index began to recede, and resumed the course of the other hygrometers, after revolving R. 6+300°.

But, during the interval of this experiment, these had moved 135°, in the same direction with that under observation, which quantity is therefore to be subtracted.

Namely R. 6+300
—135

6+165

Again, we have seen, that by the application of extreme moisture, the index had revolved, R. 6+295°
Hence, it will appear, that this process, 6+165

affected the fibres of the stem by 130

The thermometer, at the beginning of this operation, was 77°; and at the end 79°.

From the above experiments, it will appear, that, since by the application of extreme heat (procuring extreme dryness) the index had revolved from right to left, R. 2+105°
and, by the application of extreme moisture, from left to right, 6+295

it follows, that the sum of these two quantities, viz. =9+ 40
is the compass of the stem.

This result evinces, that the mean state of the atmosphere does not correspond, nor can it on any occasion, with the mean of the power of this instrument *.

A second stem having been selected, and the same process, as above related, repeated; it moved by extreme heat R. 2+290°, and, by extreme moisture, R. 8+320°; so that the compass of this fibre was R. 11+250°; which exceeded that of the former by R. 2+210; but, on examining it closer, after the operation, it was found that, although taken of the same length, it contained one twist more than the former; which accounts for its greater compass.

EXPERIMENT VI.

Application of Steam.

Three stems having been selected, and being fixed as usual, the steam of boiling water, issuing from

* The stem, which was used for this experiment, was afterwards compared, when made up, with other hygrometers; and it did not appear to have lost of its activity, by this process.

the spout of a tea-kettle, was applied to one of them; when it moved, from left to right, with violent convulsive motions, (so rapid as hardly to admit of counting them) 6 revolutions; the 2d, 6; and the 3d, $6\frac{1}{4}$; when they remained quiescent.

Now, we have seen above (exp. IV.) that a stem, of this length, and number of twists, revolved in that case $6^{R.}+300°$; and, in the present, nearly $6^{R.}+180$ (on a mean of three). The application of steam, therefore, if we consider the small difference of the two results, may be conceived to have affected the stem, only in as much as it moistened it.

Several other experiments were also tried, but being of the same nature as the foregoing, and the results nearly similar, they need not be particularized.

II.

Description of a very sensible Hygrometer,

BY LIEUTENANT HENRY KATER,

H. M. 12th Regiment.

IN the *Mysoor* and *Carnatic* is found a species of grass, which the natives call, in the Canarese language, *Oobeena hooloo*, in the Maratta, *Guvataa sæ cooslee*, and, in Tamul, *Yerudoovaal pilloo* *. It is met with in the greatest abundance, about the month of January, on the hills; but may be procured in almost every part of the country, and is very generally known.

Accident led me to remark, that the bearded seed of this grass possessed an extreme sensibility of moisture; and being then in want of an *hygrometer*, I constructed one of this material, which, on trial, far exceeded my expectations.

I caused a box to be made of brass, four inches in diameter, and an inch and a half in depth. Within the box, about a quarter of an inch from the top, was a flat ring, three-tenths of an inch in breadth, and divided into a certain number of equal parts. A hole was made, through the centre of the bottom of the box; and a circular plate of brass, about an inch in diameter, was rivetted to the bottom. On the outside, a notch was made in the rivet, similar to that in the head of a common wood screw; so that the circular plate, within the box, could be turned round, at pleasure, by means of a turn-screw, applied to the notch on the outside.

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* It is the *Andropogon Contortum* of LINNÆUS, and may be easily distinguished from all others, by the seeds attaching themselves to the clothes of those who walk where it grows.

A seed being chosen, the top of it was cut off, it having been found by experiment to be perfectly insensible. A straw, the lightest that could be procured, two inches and a half in length, and coloured at the end intended to be the index, was divided longitudinally, in the middle, by the point of a fine pen-knife: the knife was then turned a little on one side, till the opening was wide enough to admit the beard of grass; which being inserted, and the point of the knife withdrawn, the straw closed and held the beard of grass sufficiently firm.

Not being able to procure workmen, capable of executing what I wished; the *hygrometer*, thus prepared, was fixed, in a rude manner, to the circular plate at the bottom of the box, by means of a piece of sealing wax, in which a very small hole had been made, with a hot wire. The beard of grass being placed in the hole, it was closed, by touching the wax on one side with a heated wire, taking care to set the grass as upright as possible.

It remained now to determine the extremes of dryness and moisture, and to fix on some mode of division, by means of which this *hygrometer* might be compared with any other.

A new earthen pot was made very hot, by putting fire within, as well as around it; and when it was supposed to have been sufficiently burnt, to be perfectly free from moisture, the fire was taken from the inside, and the pot suffered to cool, till the air in it was of the temperature of 160°, but not lower. The *hygrometer* was then placed in the pot, being kept from touching the bottom, by means of a piece of dry wood; and it remained there nearly an hour; long before the expiration of which time, the index was perfectly steady. The *hygrometer* was then quickly taken out of the pot, and the circular plate, carrying

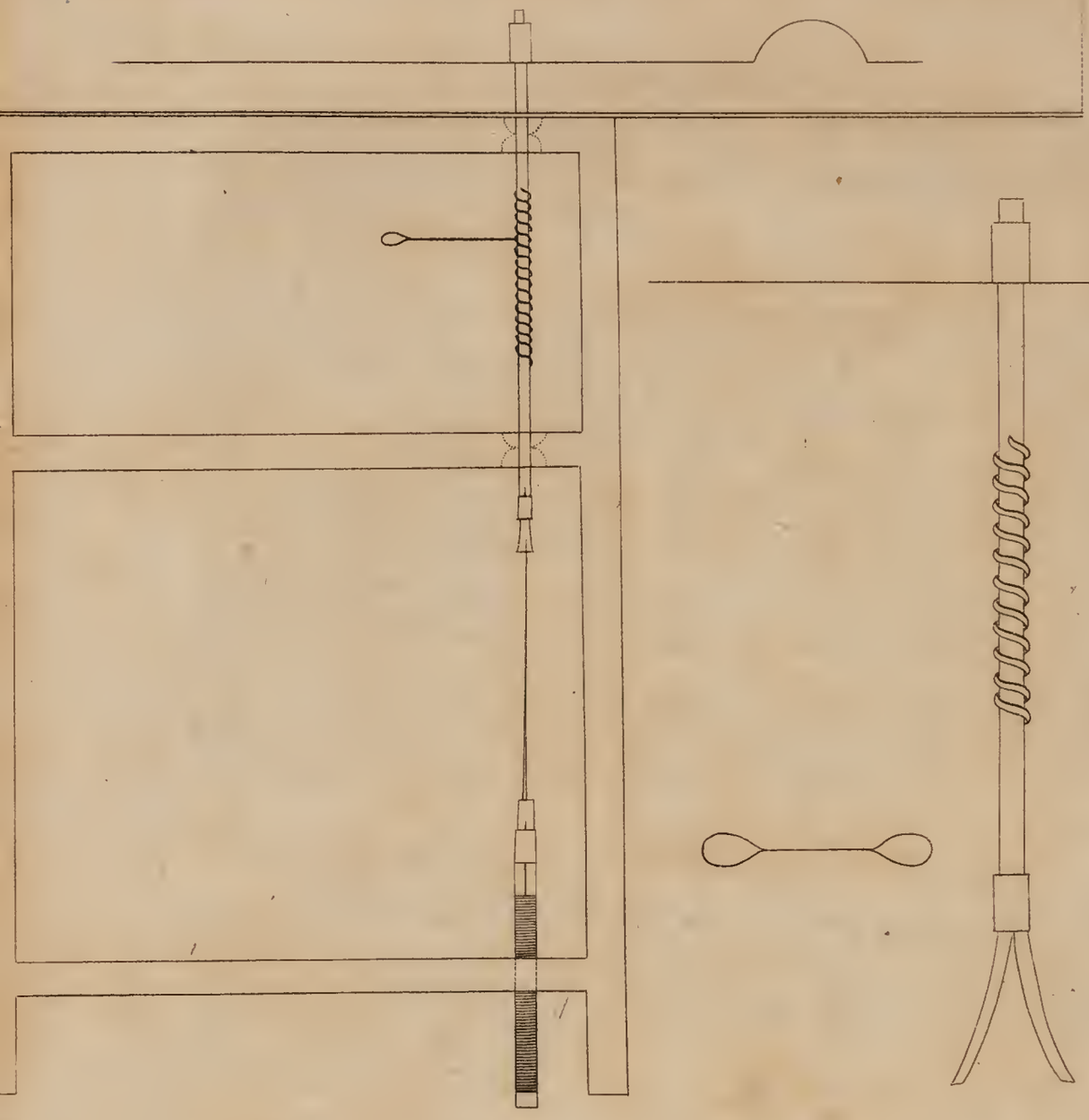
the whole, was turned round, by means of the notch on the outside, till the index, or coloured end of the straw, pointed to Zero.

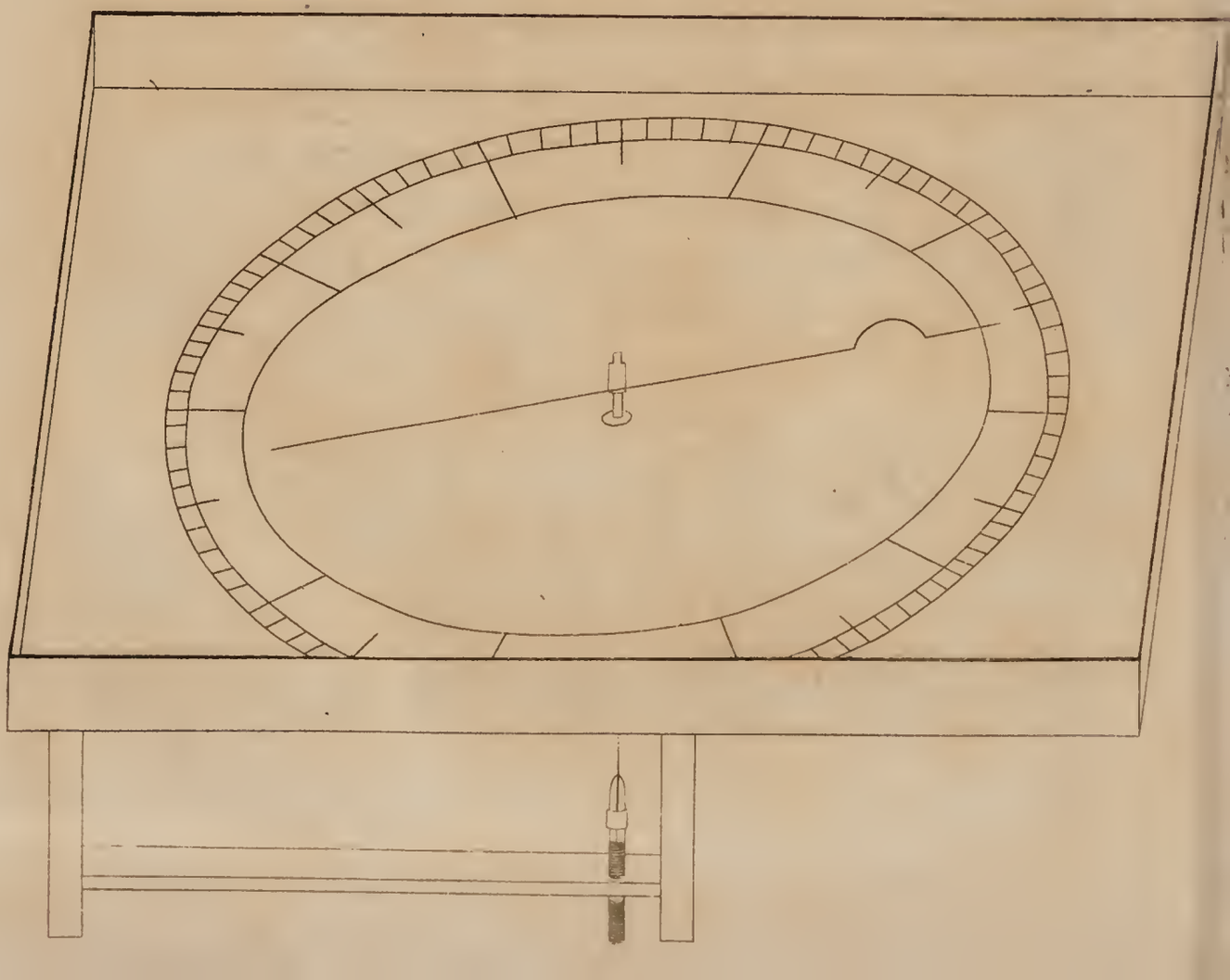
To obtain extreme moisture, it was at first thought, that the best mode would be to fill the box with water; but, on trial, this was found to disturb the index too much. The beard of grass was therefore thoroughly wetted, with a fine hair pencil dipt in water, and the number of revolutions, made by the index, observed. Care was taken, to allow sufficient time, for the water to have its utmost effect; and, in this manner, the *hygrometer* I have at present was found to make three and a half revolutions, between extreme dryness and extreme moisture.

As some fixed mode of division is necessary, to render observations, made by different persons, intelligible to others; I imagine the scale of this *hygrometer* to be divided into 1000 equal parts, commencing at extreme dryness.

The sensibility of this instrument is very great. The effluvia of a finger, applied about a quarter of an inch from the grass, causes the index immediately to shift *eighteen divisions;* and, on withdrawing the finger, it instantly returns to its former situation. Gently breathing on it, at the distance of about a foot, moves the index *fifty-six divisions*. It is equally susceptible of the moisture of the *atmosphere;* scarcely ever remaining steady, for any length of time, in variable weather.

Such was the construction I at first employed; but on applying it to use, so much difficulty occurred, in ascertaining the number of revolutions made by the index, that I was induced to attempt to give the whole a more convenient form, and to adapt to it a scale, such as might preclude the possibility of mis-





lake, and, at the same time, leave the *hygrometer* in possession of its extent and sensibility.

A B C D fig. 1. represents a piece of wood, about fourteen inches long, three inches broad, and one inch, and two-tenths thick: the upper part is cut out, as in the figure, to the depth of two inches, leaving the sides A and B, about three-tenths of an inch thick: the wood, thus prepared, is morticed into a square board, which serves as its support.

Fig. 2. is an ivory wheel *, about an inch and two-tenths *diameter*, and two-tenths of an inch broad at the rim. A semicircular groove is made in the circumference, of such a depth, that the *diameter* of the wheel, taken at the bottom of the groove, is one inch. Through the axis, which projects on one side four-tenths of an inch, a hole is made, the size of a common sewing needle; and, on this, as a centre, the wheel should be carefully turned; for, on the truth of the wheel, the accuracy and sensibility of the instrument chiefly depend. From the bottom of the groove, a small hole is made, obliquely through the side of the wheel, to admit a fine thread. All the superfluous ivory should be turned away, that the wheel may be as light as possible.

Fig. 3. represents a piece of brass wire, two inches long; on one end of which a screw is made, an inch and a half in length; and, in the other, a notch is cut, with a fine saw, to the depth of half an inch. This part is tapered off, so that the notch, which is intended to hold the beard of grass, in the manner hereafter described, may be closed, by means of a small brass ring (a) which slides on the taper part of the wire.

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* In my first experiments I used a wheel made of card paper, with an axis of wood, which answered very well.

A little below the centres of the semicircles A and B, (fig. 1.) two holes are made, precisely in the same direction: one of these is intended to receive the screw fig. 3, and the other a gold pin, which is to project four-tenths of an inch beyond the inside of the part A. The pin is made rather smaller than the hole in the axis of the ivory wheel, and is highly polished; in order that the motion of the wheel may be the less impeded by friction.

Two fine threads, about fourteen inches long, are passed together through the hole in the groove of the wheel, and are prevented from returning, by a knot on the outside. To the ends of these threads, two weights are attached, *exactly similar*, and just heavy enough to keep the threads extended.

One of the threads having been wound on its circumference, the wheel is to be placed on the pin, about the tenth of an inch from the side A, as in fig. 4. Two glass tubes, of a sufficient bore to admit the free motion of the weights, are fixed in grooves, in such a manner, that each thread should fall exactly in the axis of the tube. The tubes are so long as nearly to touch the ivory wheel.

The beard of the *Oobeena hooloo* being prepared, as for the circular *hygrometer*, by cutting off that part which is useless, is inserted about the tenth of an inch, in the projecting end of the axis of the wheel, and confined by a small wooden pin, which is to be broken off close to the axis; the other end is placed in the notch of the brass screw, before described, and secured by means of the sliding ring.

It is evident, that when the grass untwists, the wheel will turn on the gold pin; and the thread, which is wound about it, with the weight attached,

will descend in the one glass tube; whilst, on the contrary, the weight on the opposite tube will ascend, and *vice versa*.

The beard of the grass is now to be thoroughly wetted, with a hair pencil and water, and when the wheel is stationary, the weights are to be so adjusted, by turning the brass screw, that the one shall be at the top, and the other at the bottom of the glass tubes, which points will mark *extreme moisture*.

The instrument must then be exposed to the sun, or to some heat, not powerful enough to injure it, but sufficient to obtain a considerable degree of dryness. The weights will now change situations; and, probably, on the first trial, will continue to move *beyond* the glass tubes. Should this happen, the beard of grass is to be shortened, by sliding back the ring, and advancing the brass screw, so as to include a longer portion in the notch. Other trials are to be made, and the length of the grass varied, till the extremes of dryness and moisture are within the limits of the glass tubes.

As this instrument cannot conveniently be exposed to so high a temperature, as is necessary to obtain extreme dryness; this point may be ascertained by means of a *standard* circular *hygrometer*. The point of extreme moisture has been already determined; and in the circular *hygrometer*, the number of revolutions, &c. between the extremes is known. The two *hygrometers* are to remain sometime together, that they may be in the same state with respect to moisture; marks are then made, where the weights rest in the glass tubes, and the degrees shewn by the index of the standard *hygrometer* noted. Lastly, the distance between these marks and extreme moisture, is to be divided into the same number of equal parts, as are indicated by the standard *hygrometer*, and the

divisions continued to the number denoting *extreme dryness.*

If the whole of that part of the *Oobeena hooloo*, which possesses the hygroscopic property be used, the scale will comprize more than *twenty-four* inches, a length, which, though perhaps useful on particular occasions, will not be found convenient for general purposes.

From an idea, that in a high state of moisture, the grass would not retain sufficient power to move the wheel equably, it was thoroughly wetted, till it indicated extreme moisture, and, while in this state, the wheel was drawn round, by laying hold of one of the threads: on releasing it, it instantly regained its former situation, with considerable force. The same experiment was made, in various other states of moisture, and it was always found, that the weights returned immediately to the degree from which they had been removed.

It would perhaps be an improvement, if a light wheel, of brass, or any other metal, not liable to rust, were used instead of the ivory one; the grass having been found, by experiment, to be capable of moving a wheel of lead. The axis of the wheel might be made very small, and supported on Ys, which probably would add much to the sensibility of the instrument.

I have as yet had no opportunity of comparing this with any other hygrometer; but it is simple in its construction, not easily disordered, and should seem, from the extent of its scale, to be particularly adapted to experiments, in which small variations of moisture are to be observed.

The *hygrometer* has been hitherto an instrument, rather of curiosity than utility. But from most

accounts that we have, it appears very probable, that this instrument has more to do with the phenomena of *refraction*, than either the *barometer* or *thermometer*. If then we could obtain a number of observations of apparent altitudes, together with data from which to calculate the true, noting at the same time the *hygrometer*, *barometer*, and *thermometer*, perhaps some law might be discovered, which might enable us to ascertain the quantity of the effect of moisture on refraction. It was with this view the *hygrometer* above described was constructed; but not having yet had an opportunity of obtaining the requisite observations, it is to be hoped, they may be made, by those who are in possession of time and instruments, equal to the undertaking.

III.

An ESSAY *on the* SACRED ISLES *in the West, with other Essays connected with that work.*

BY CAPTAIN F. WILFORD.

ESSAY II.

ANU-GA'NGAM, *or the Gangetic Provinces, and more particularly of* MAGAD'HA.

THE kingdom of *Magad'ha* in *Anu-Gàngam* is the province of south *Bahàr*, and is acknowledged to be thus called, from the *Magas*, who came from the *Dwìp'a* of *Sàca*, and settled in that country, which was called before *Cìcatà;* from which, its principal river, the *Fulgo*, is called *Cacuthis* by ARRIAN. *Magad'ha*, or *Màgad'ha*, is called *Moktah* in the *Ayìn-Acberi* *. The Chinese, according to Mr. DE GUIGNES, call it *Mokiato*, and *Mokito*, and KEMPFER says, that the Japanese call the country, in which S'A'CYA was born, *Magatta-kokf*, or country of *Magatta*. Arabian and Persian writers and travellers call it *Màbàd:* for one of them, according to D'HERBELOT, says, that the Emperors of India resided in that country. *Màbàd*, *Màbed*, and *Tabet*, are, I conceive, derived from *Mubàd*, which, according to the learned HYDE, is a contraction from *Mughbàd*, or the learned among the *Mughs*, or *Magas;* and the author of the *Dabistan* calls a certain sect of *Bràhmens*, if not the whole of them, *Màhbàd*. From *Magad'ha* they made also *Maiet*, and *Muiet*. These appear generally as two different countries; but I believe, they are but one. Thus *Maiotta*, one of the *Comorro* islands, is called by former European travellers *Maiotte*, and *Magotte*, answering to *Maied* and *Magad'ha*. The same is mentioned in the Peutingerian

* Vol. 3d. p. 241. In the original مکتا and probably should be read *Magata*.

Tables, under the name of ELYMAIDE; which appellation, being probably obtained through the information of Arabian travellers, and merchants, seems to be derived, either from the Arabic EL-I-MAIED, the inhabitants of *Maied;* or from *Almaied*, in the same manner that they say AL-TIBET, AL-SIN. Former European travellers mention a country called *Mevat*, in the Eastern parts of India, and which can be no other than *Mábat:* and instead of *Modubæ* in PLINY, we should, probably, read *Mobedæ*, answering to the EL-I-MAIED of Arabian travellers. On the borders of *Elymaide*, toward the N. E. are the *Lymodi* mountains, near which were elephants in great numbers. *Magad'ha* proper is *South-Bahar:* but, when its kings had conquered, according to several *Purán'as*, the whole of the Gangetic Provinces, (which they considered afterwards, as their patrimonial demesnes;) *Magad'ha* became synonymous with *Anu-Gangam*, or countries lying on the banks of the *Ganges*. The Gangetic Provinces are called to this day, *Anukhenk* or *Anonkhek* in *Tibet;* and *Enácác* by the Tartars; and they have extended this appellation to all India.

In *Ceylon*, according to CAPT. MAHONY, and in *Ava*, according to MR. BUCHANAN, the appellations of *Pâli*, or *Bàli*, and *Magad'hí* are considered as synonymous, at least, when applied to their sacred language; which I consider, from that circumstance, to be the old dialect of *Magad'ha:* which is called also the kingdom of *Poli* by Chinese writers. In *India* this name for *Magad'ha* is unknown: but its origin may be traced through the *Purán'as*. DIODORUS the SICILIAN says, that *Pàli-putra* was built by the Indian HERCULES, whose name, according to CICERO, was BELUS, and in Sanscrit BALA, or BALAS, the brother of CRISHNA, more generally called BALA-RA'MA and BALA-DE'VA. BALADE'VA built three cities for his sons, which he called after his own

name, *Bala-déva-pattan:* but they were better known under the name of *Bàli-pura*, and *Mahá-Báli-pura*, pronounced *Màvelivoram* in the *Deccan*. One was on the *Coast of Coromandel*, south of *Madras;* the second, in the inland country of *Beder*, in the *Peninsula;* and the third, on the banks of the *Ganges:* this is acknowledged to be *Ràja-grĭha*, or *Rája-mahl*, the royal mansion, or city; and which we must not confound with *Rája-grĭha*, the royal abode of old SAND'HA. It is true, that according to some legends, current in the *Deccan*, the founder of *Mahà-Bàli-pura*, was BALI the DAITYA, an antediluvian: but other legends refer its foundation to BALA, the brother of CRISHNA: and the principal circumstances of these legends shew, that it is taken from the *Puràn'as;* and that it is the story of the wars of CRISHNA, and BALA, or BALA-RA'MA with BA'NA'-SURA, who lived in the countries bordering upon the *Ganges;* and whose place of abode is still shewn near *Purneah:* and about whom, many wonderful stories are related by the inhabitants. This BALI is then the same with BALA, the brother of CRISHNA: and in Lexicons we find a certain ANGADA, said to be called also BALI-PUTRA in a derivative form, or the son of BALA, or BALI: but in the *Puránas* he is said to be the son of GADA, also a brother of CRISHNA, to whom he gave the district of *Gházipoor*, the true name of which, is *Gádi-pura*, from GADA. The country of *Canouge* fell also to his lot: and from him that city is also denominated *Gádipoor*, or *Gada-pura*. VALI was also the name of a chief of the monkies, and his son was equally called ANGADA. BA'N'A'SURA built three cities, which BALA took, and destroyed; and then rebuilt, for his children, calling them after his own name *Báli-pura;* as GADA called his own place of abode *Gádi-pura*. The children of BALA are not mentioned in the *Purán'as*, and he is never called BA'LI there: but it is admissible, particularly in composition. He is also called HALA and HA'LI:

and SA'LA-VA'HANA is more generally denominated SA'LI-VA'HANA. *Palipotra*, or *Palibothra*, according to DIODORUS the *Sicilian*, was built by the Indian HERCULES; whose real name, according to CICERO, was BELUS from BALA, or BALAS. His son was better known under the name of BALI-PUTRA; as the founder of *Patna*, under that of PA'TALI'-PUTRA, or the son of the Goddess PA'TALI': ANGADA, his sirname, was given to him from the country of *Anga*, which had been allotted to him. Thus *Magad'ha* takes its name from the sage MAGA, who settled there. These three cities were to be destroyed by water, and this is true of *Mahá-báli-voram* near *Madras*, and of *Páli-putra* on the *Ganges*: the third is yet existing in the province of *Beder* in the *Peninsula*, and its name is *Bali-gríha*, or *Báli-pura*. It is more generally known under the name of *Muzaffernágar*. It is not far from *Cundana-pura*, where king BHISHMACA resided, and was the father of RUCMANI, CRISHNA's legal wife. *Cundana-pura* is generally mistaken for *Báli-grĭha*, on account of its vicinity; and, of course, supposed to have been built by BALA; and it is but lately that I have been able to rectify this mistake. The descendants of this HERCULES, says DIODORUS, did nothing, which deserved to be recorded: in this agreeing with the *Puránics*. The kingdom was restored to the posterity of old SAND'HA, who ruled there, for a long time, under the name of the VA'RHADRAT'HAS, or children of VRĬHADRAT'HA.

These are not then the BA'LI-PUTRAS, or PA'LIBOTHRI kings, who sate on the throne of *Magad'ha*, in the time of ALEXANDER, and his successors. Before the conclusion of the great war, the conquerors gave various districts to their friends. DURYO'D'HANA gave the district, about *Bhagulpoor*, to his friend CARNA. CRĬSHNA, long before, had given the country, now called *Bhója-pura*, to his friend and re-

lation BHO'JA; and BALA-RA'MA placed his family in the country about *Raja-mahl:* these were of course BA'LI-PUTRAS: but they could not be the BA'LI-PUTRAS, or PA'LI-BOTHRI kings, in the time of ALEXANDER, and his successors. We are informed, in the *Bhágavata*, that king MAHA'-NANDA assumed the title of BALI, and MAHA'-BALI: consequently his offspring, who ruled after him, for a long time, were BA'LI-PUTRAS: the kingdom of *Magad'ha* was called the kingdom of *Báli*, *Páli*, and *Poli:* the dialect of that country is, as before observed, indifferently called *Bâli*, *Páli*, and *Magad'hi* in *Ceylon* and the *Burman* Empire, according to CAPTAIN MAHONY, MR. JOINVILLE, and MR. BUCHANAN. The city, in which the BA'LI or PA'LI-PUTRAS resided, was of course denominated from them. *Bàli-putra*, or *Pàli-putra;* and by the Greeks *Pàli-bothra*, and, in the *Peutingerian* Tables, *Pàli-potra*. Their patrimonial estate was called *Pàliputra-man'dalam*, the circle, or country of the *Pàli-putras*. This simple and obvious denomination, was strangely disfigured by PTOLEMY, who calls the city, *Pàli-bothra* of the *Mandalas;* instead of saying that it was in the *Man'dala*, or country of the *Pâlibothras*, or *Bàli-putras*.

Tradition says, that MAHA'-BALI built a country seat, on the banks of the *Soane;* round which a small town was soon formed, and called MA'HA-BA'LI-PURA, (or *Mawbellypoor* in MAJOR RENNELL's Atlas). There I was looking, at first, for *Bàli-putra*, or *Palibothra*. *Patna*, or at least a town called *Cúsumá-puri*, was built, according to the *Brahmàn'da*, by king UDASI, grand father to MA'HA-BALI, about 450 B. C. It was then called *Cusumá-puri*, or the flowery city, and *Padmá-vati*, or the city of the *Lotos*. Tradition says, that the old site of this city was at *Phulwári*, which, in the spoken dialects, signifies the same with *Cusumá-purì:* but, the *Ganges* having altered its course, the city was gradually removed from *Phulwári*,

to the present site of *Patna;* which was called also *Pátalì-putra*, from the son of a form of DE'VI, with the title of PA'TALI'-DEVI', or the thin Goddess. Her son was, in general, called PA'TALI'-PUTRA, and the town PA'TALI'-PUTRA-PURA. I have shewn, in my essay on the chronology of the Hindus, that this city is called *Patale* by PLINY. It was called *Patteáli* simply, at the time of the invasion of the Musulmans, as it appears from FERISHTA's translation by COLONEL DOW: and the inhabitants are considered there as robbers, and, of course, ranked with those of *Bhojepoor* and *Kuttehr*. The last district, formerly called *Castere*, and now *Cuttere*, is a *Purgunah*, a little to the west of *Benares;* and the inhabitants behave very well now: those of *Bhojepoor* are far from being radically cured of their evil propensities. When the Musulmans took possession of *Patna*, many of the most obstinate robbers withdrew to *Deryapoor*, according to tradition, and were very apt to commit depredations occasionally; at least formerly.

It is said in the *Bhàgavata*, that MAHA-BALI resided at *Padmàvatì* or *Patna:* and one of his titles, in that *Puráńa*, is MAHA-PADMA-PATI-NANDA, or NANDA the great Lord of the *Lotos*. Like PARA'SURA'MA, he either destroyed, or drove out of his dominions, the remnant of the CSHETTRIS, or Military tribe, and placed SU'DRAS in their room. These were the Barons of the land, who often proved troublesome. RA'JA BULWANT SING, the predecessor of CHET SING, did the same, in the district of *Benares*, with the Zemindars, who represented the CSHETTRIS, and even pretended to be really so; from an idea, that it was impossible to improve the revenues, arising from the land-tax, under their management. MAHA'-PADMA, or BALI, was born of a woman of the *Súdra* tribe. According to PTOLEMY, the country of the *Báli-putras* extended from the

Soane, beyond *Moorshedábad*, as far as *Rangámatty;* which he places in their *Mandalam*, or country, under the name of *Oreophonta*, as I have shewn in my essay on the chronology of the Hindus: in the west, he mentions *Sambalaca*, now an assemblage of small huts, on a sandy islet, opposite to *Patna*, called *Sambulpoor*, and *Sabelpoor* in MAJOR RENNELL's Atlas.

II. The NUBIAN Geographer, with RENAUDOT's two Musulman travellers, place together the countries of *Háráz (Orissa) Mehráge*, and *Mábed* or *Máyed*, *Táfek* or *Tucha* (now *D'hácá*,) and *Mougá*, or the country of the *Magas*, or *Mugs*, now *Chittagong*, *Arracan*, &c. The country of *Mehráge*, says D'HERBELOT, is placed, by some, in the *Green Sea*, or *Gulf* of *Bengal;* and by others, in the *Chinese* Seas: and the *Gangetic* provinces, at least *Bengal*, were known under that name, even as late as the fifteenth century; for it is called *Mahárájia*, or *Maarascia* by NICOLO DE CONTI, who visited that country. There were two countries of that name, which are occasionally confounded together: the first, at the bottom of the *Green Sea*, included *Bengal*, and other countries on the banks of the *Ganges*. The second comprehended the *Peninsula* of *Malacca*, and some of the adjacent islands, in the Seas of *China*. In these countries the Emperors and Kings always assumed the title of MAHA'-RA'JA', even to this day. Their country, in general, was called *Zápáge* or *Zábája*, which is a corruption from *Jává*, or *Jábá*, as it was called in the west; and was also the name of *Sumátrá*, according to PTOLEMY, who calls it *Jábá-diu*, and to MARCO PAULO. In the peninsula of *Malacca* was the famous emporium of *Zába: Zábája*, in Sanscrit, would signify those *Zába*. The Empire of *Zábáje* was thus called, probably from its metropolis *Zábá*, as well as the principal islands near it. *Zábá* was a famous emporium, even as early as the time of PTOLEMY. It remained so till the time of the two

Musulman travellers of RENAUDOT, and probably much longer. It is now called *Bátu-Sábor*, upon the river *Johore*, which is as large as the *Euphrates*, according to these two travellers; who add, that the town of *Cálabar*, on the coast of *Coromandel*, and ten days to the south of *Madras*, belonged to the MAHA'RA'JA' of *Zábáje*. The wars of this MAHA'RA'JA', with the King of *Al-Comr*, or countries near *Cape Comorin*, are mentioned by the two Musulman travellers, in the ninth century: and, it seems, that, at that time, the MA'LA'YAN Empire was in its greatest splendor. About two hundred years ago, the MAHA'RA'JA' of *Bengal* sent a powerful fleet to the *Maldivian* islands. The King was killed in the engagement, and the MAHA'RA'JA''s fleet returned in triumph to *Bengal*, according to DELAVAL's account. Tradition says, that the King of *Lanca*, which implies, either the country of the MAHA'RA'JA', of *Zápáge*, or *Ceylon*, but more probably the first, invaded the country of *Bengal*, with a powerful fleet; and sailed up the Ganges, as far as *Rangámatty*, then called *Cuṣúmá-puri*, and a considerable place, where the King, or MAHA'RA'JA', often resided. The invaders plundered the country, and destroyed the city. This happened long before the invasion of *Bengal* by the Musulmans, and seems to coincide with the time of the invasion of the *Peninsula* by the MAHA'RA'JA' of *Zápáge*. This information was procured, at my request, by the late LIEUTENANT HOARE, who was remarkably fond of inquiries of that sort; and to whom I am indebted for several curious historical anecdotes, and other particulars, relating to the geography of the *Gangetic* Provinces. It seems that there was little intercourse, probably none, between *India* and *China* in former times. The first notice we have of such an intercourse, is, that an Emperor of *China*, called VOUTI, sent his General TCHANG-KIAO, with a retinue of a hundred men, to visit the western countries, such as *Khorassan* and *Meru-al-náhár*.

There he procured some information about *Persia*; and seeing rich articles of trade from *India*, his curiosity prompted him to visit also that country. He began his travels 126 B. C. and returned to *China* in 115. That there was a constant commercial intercourse between *China* and *India*, and even *Ceylon*, about the beginning of the Christian Era, is attested by PLINY *. The same passage establishes also a regular intercourse between the *Roman* merchants and *China*, at that early period. This singular passage I shall insert here, as corrected by SALMASIUS: for PLINY's style is often obscure, from his fondness for quaint words and expressions. A certain King of *Ceylon* sent once four ambassadors to the Emperor CLAUDIUS; and the chief of this embassy was called RACHIAS, who being interrogated, whether he knew the *Seres*, or *Chinese*, answered "*Ultra montes Emodos Seras quoque ab ipsis aspici, notos etiam commercio. Patrem* RACHIÆ *commeasse eò: advenis sibi Seras occursare.*" Then PLINY says, "*Cætera eadem quæ nostri negotiatores: fluminis ulteriore ripâ merces positas juxta venalia tolli ab his, si placeat permutatio.*" This I shall take the liberty to paraphrase in the following manner. RACHIAS answered, that the *Seres* lived beyond the *Haimada*, or *Snowy* mountains, with regard to *Ceylon:* that the *Seres* were often seen, or visited, by his countrymen; and were well known to them, through a commercial intercourse. That his father had been there, and whenever caravans from *Ceylon* (and *India* I should suppose) went there, the *Seres* came part of the way to meet them in a friendly manner; which, it seems, was not the case with the caravans from the west, consisting of Roman Merchants. Then PLINY adds; as for the rest, and the manner of disposing of the goods, the *Seres* behave to them as they do to our merchants. *Rachia* is derived

* Pliny, lib. 60, c. 220.

from the Sanscrit *Racsha*, pronounced *Rácha* in the spoken dialects: and *Ráchya*, or *Ráchia* is a derivative from. It is the name, or rather the title, of one of the heroes of the *Puránas*. Another derivative form is RACSHITA, and is the name of a priest of BUDD'HA in *Ceylon*, mentioned in the sixth vol. of the Asiatic Researches*; where, according to the idiom of the spoken dialects, he is called RA'C'HITA-BUDD'HA: and I suppose, that neither *Racsha*, nor *Racshita*, can be properly used, but in composition. YARCHAS, the name of a *Bráhmen*, mentioned in the life of APOLLONIUS, is probably a corruption from *Rác'hyas*. The Emperor CLAUDIUS began his reign in the 44th year of the Christian Era; and the predilection of the *Chinese* for the people of *India*, and *Ceylon*, was very natural. Thus we see that the people of that island traded to *China*, at the very beginning of our Era, and by land. There can be no doubt, that they went first by sea to the country of *Magad'ha*, or the *Gangetic* provinces; where their legislator BUDD'HA was born, and his religion flourished in the utmost splendor. There they joined in a body with the caravans of that country, and went to *China*, through what PTOLEMY, and the author of the Periplus, call the great route from *Palibothra* to *China*. It was in consequence of this commercial intercourse, that the religion of BUDD'HA was introduced into that vast empire, in the year 65 A. C. and from that *Era* we may date the constant and regular intercourse between *Magad'ha* and *China*; till the extirpation of the religion of BUDD'HA, and the invasion of the Musulmans.

The account given by the son of RACHIAS, has nothing very extraodinary in it, when the whole is

* p. 450.

considered in a proper light; and it shews the carelessness of the *Greeks* and *Romans*, in inquiries of that nature. The regard the *Hindus* have for the seven *Rĭshis*, or the seven stars of the great *Bear*, and which they saw so much above the Horizon, made them often look up to them, as well as to the *Pleiades*. From this circumstance, the *Romans* foolishly conceived they never saw them before. They also often mentioned the star *Canopus*, for which the *Hindus* entertain the highest respect. The ambassadors of *Ceylon* were surprised, to see the *Romans* consider the East and West, as the right and left of the world; and declared it was otherwise in their own country; and that the sun did not rise in the left, nor set in the right, according to their mode of reckoning. For the *Hindus* say, that the East is before, and the West behind; and the shadow of bodies must have been affected in the same manner. With respect to the moon's course, there is the bright half, and the dark half; which, in *India*, constitutes what is called the day and night of the *Pitrĭs*. The day is reckoned, from the first quarter to the last; and this is called the bright half, or the day of the *Pitrĭs*; the dark half is from the last to the first quarter of the next moon; and this constitutes their night. When PLINY says, that, in their country, the moon was seen only from the 8th to the 16th, he was mistaken; he should have said, that the bright half, or day of the *Pitrĭs*, began on the eighth day, and lasted sixteen days, including the eighth: and then began the dark half, or night of the *Pitrĭs*; and, from these expressions misunderstood, the *Romans* concluded that the moon was not to be seen, in their country, during the dark half.

III. According to MR. DEGUIGNES, the king of *Tientso*, or *India*, sent men by sea to *China*, carrying presents to the Emperor, in the years 159 and 161.

The CHINESE called *India Shinto*, and *Into*, *Sind*, and *Hind*: they call it also *Tientso*, and divide it into five parts: middle *Tientso*, with North, South, East, and West *Tientso*. Mr. DEGUIGNES says, they called *India Mokiato*, and *Polomuenkouè*, or country of *Polomuen*; *Mokiato*, the *Magatta* of the *Japanese*, is *Magad'ha*, including all the *Gangetic* provinces; and it was called *Polomuen*, from the famous Emperor PULIMA'N, or POLOMA'N, called by DEGUIGNES, *Houlomien* and *Holómiento*. The *Chinese* gave the name of *Magad'ha* to all *India*; because their knowledge of that country, and their intercourse, was for a long time confined to *Magad'ha*, which is also called *Anu-Gangam*; distorted, by those of *Tibet*, into *Anonkhenk*, and *Anákák* by the *Tartars*, who have no other name for *India*. Thus, in the Empire of the *Burmahs*, they call *India Calingáhárit*, from *Calinga*, or the *Peninsula* of *India*, with which they are better acquainted: *hárit* in their language, and *harita* in Sanscrit, signifies *country*; and the whole compound the country of *Calinga*. The metropolis of *India* was situated on the banks of the *Kengkia*, or *Hengho*, the *Ganges*. This river, says the same author, they call also *Kiapili*, because, I suppose, it enters *India* through the pass of *Capila*, called, in the life of TIMUR, *Kupelé*.

The name of the Metropolis was *Chapoholo-ching*, *Kiusomopoulo-ching*, *Potoli-tsching*, answering to *Pátali*, *Cusumá-puri*, the well known names of *Patna*. *Chapoholo* answers to *Samalla*, or *Sambala*, now *Sumbulpoor*, written also *Sabel-poor*, and close to *Patna*: and is obviously meant for that city, by the *Chinese*, as well as by PTOLEMY.

Another Chinese name for it, is *Cutukilopoulo*, which I must give up, unable to reduce it to its original Sanscrit, or Hindu standard.

In the year 408, YUEGNAI king of *Kiapili*, that

is to say, of the countries bordering on the river *Kiapili*, or *Ganges*, sent ambassadors to *China*. He was a follower of BUDD'HA, and his Hindu name was probably YAJN'A.

In the year 473, the king of the country of *Poli* sent also embassadors to *China*. The kingdom of *Poli* is that of *Magad'ha*; for *Magad'ha*, and *Páli*, or *Báli*, are considered as synonymous, by the people of *Ceylon*, *Siam*, and the *Burmahs*.

In the year 641, the *Indian* king of the countries, belonging now to the Great Mogul, and included in the *Mokiato* or *Magad'ha* Empire, says DEGUIGNES, sent embassadors to *China*. The following year, the Emperor of *China* sent embassadors to him. His name was HOULOMIEN, PULIMA'N or LOMA, and he was greatly surprised at it. There the *Chinese* learned, that the *Hindus* called their country *Moho-chintan*, for *Mahá-china-st'hán*: in the *Peninsula* this word is pronounced *Macâchina*.

In the year 647, the Emperor of *Mokiato*, or *Magad'ha* sent again embassadors to *China*, as well as the king of *Nipolou* or *Nepàl*. In the following year, TAITSONG sent an embassy to the king of *Mokito*, or *Magad'ha*. In the mean time, HOULOMIEN died, and the whole country was thrown into confusion: he was a great warrior, and reduced all *India*, in the year 621, under his yoke. The name of his family was KIELITIE'; which, for a long time, had been in possession of the throne. PULIMA'N was the last of the kings of the royal family of AND'HRA. This family is considered, in *India*, as a spurious branch; which circumstance is fully implied, by the appellation of *Caulat'éya* in *Sanscrit*, or the offspring of the unfaithful woman, and from *Caulat'éya* is probably derived the KIELITIE' of the *Chinese*. There is a DYNASTY of *Caulat'éyas* barely mentioned by the *Paurán'ics*; and they are, pro-

bably, the same with the AND'HRA-JA'TICAS, and the KIELITIE' of the *Chinese* Historians.

The AND'HRA kings, on the banks of the *Ganges*, were famous all over *India*, and in the west: for the AND'HRA tribe, or family, is placed to the north of the *Ganges*, by the compiler of the *Peutingerian* Tables, under the name of *André-Indi*, or *Indians* of the AND'HRA family or tribe. After PULIMA'N, the AND'HRA *Bhrityas*, according to the *Purán'as*, or the servants of the AND'HRA kings, usurped the government; and the *Chinese* historians take particular notice of this circumstance.

It is declared, in several *Purán'as*, that MAHANANDA, and his successors resided at *Padmávatì*, or *Cusumápuri*, by which *Patna* is understood. But these are only epithets, and not the real name of a city; and always given by poets to favourite towns. Thus *Burdwan* was called *Cusumápuri*; and *Rangámatti*, near *Moorshedabad*, likewise, as well as the town of *Hustináp oor*. It is remarkable, that of the cities in *India*, once famous in the writings of the *Greeks* and *Romans*, few now are known under these names in *India*. Thus TAXILA is a name unknown in *India*; and it was only after perusing the *Purán'as* for many years, that I found it barely mentioned in one or two of them. It is the case with TAGARA', the name of which is only found in a grant, some years ago discovered at *Bombay*.

The kings of *Magad'ha* certainly resided very often at *Patna*, and latterly they forsook intirely *Báliputra*, probably owing to the vicinity of *Gaur*, the *Rájáhs* of which, when powerful, could not but prove troublesome neighbours; besides, the continual encroachments of the *Ganges*, and the gradual but constant decay of the metropolis, occasioned by them, naturally obliged the kings to look out for a more agree-

able situation. Of the time of the total subversion of *Bálì-putra*, or *Rája-grĭha*, we cannot form any idea; but there is every reason to believe it took place at a very early period; for *Páli-bothra* is not mentioned in the *Peutingerian* tables, and *Mágad'ha*, or *Patna*, is pointed out as a capital city, under the name of *Al-mágad'ha*, or *Eli-maide*, *Al-maied*.

IV. The trade of *Páli-bothra*, and of the kingdom of *Magad'ha*, in its days of splendor, was astonishing, and is attested by PTOLEMY, ARRIAN in his Periplus, and the *Peutingerian* tables. The same is attested by *Chinese* historians, and the two Mohammedan travellers. From *Páli-bothra* to the *Indus* there was the royal road; and the distances all along were marked with columns. There was another road, leading from *Baroche* to *Elymaide*, *Al-maied*, *Al-muiet*, and *Al-mujiat*, or *Patna*, called also, in Sanscrit books, *Magad'ha*, as well as the country. This is mentioned in the *Peutingerian* tables, and the distance marked 700, which I take to be *Bráhmeni* coss, equal to 856 British miles. In the *Peutingerian* tables, *Bároche* is called *Paricea*, and the road to *Elymaide* leads through a place called *Nincilda*, the true name of which I take to be *Nila-cunda*, the *Blue-pool*, or rather the *pool-cun'da*, dedicated to NILACANTES'WARA or IS'WARA, with the *blue neck*. From *Al-maied* there is another road, leading through the *Burman* empire, *Siam*, and ending at *Calippe*, now *Columpé*, in the kingdom of *Cambodia*. According to the *Peutingerian* tables, this road went from *Patna*, first to the country of *Colchi*, called *Chalcitis*, *Chalcis*, by PTOLEMY, and the distance marked is 625; which, being supposed to be coss, are equal to 742 B. *miles*. Near the *Colchi* country, in the tables, are placed the *Sindi*, equally mentioned by PTOLEMY, and also a place called *Pisauta*, probably the modern *Pitshiai*. Then, from *Colchi* to *Thimara*, probably the *Tomara* of PTOLEMY; and the distance is 450

coss, or 565 B. *miles*. Then to *Calippe*, or *Columpé*, 220 coss, or 270 B. *miles*. This route was certainly known to PTOLEMY, from whom we may collect a few more particulars. From *Palibothra* this route went towards the east, to *Sagoda*, *Authina*, *Salatha* and *Randamarcotta*. *Sagoda* is *Sagow*, on the western bank of the *Burrampooter*, and in *lat.* N. 24° 35′, according to MR. BURROW, in the fourth volume of the Asiatic Researches. This I mention, because it is not noticed in MAJOR RENNELL's Atlas. *Sagoda* is the form of the possessive case in the western parts of *India*, and generally used instead of the first case, by the *Greeks* formerly, and modern travellers of the two last centuries. *Athina* is *Eetenah*, to the westward of *Azmerigunge:* NONNUS calls it *Anthené*, and takes notice of its flowery shrubs*: thence to *Salatha*, or *Silhet*. The next place is *Randamarcotta*, which I suppose to be *Ava*, the real name of which is *Amara-pura:* it is called also *Rád'hun-pura*, according to COL. SYMES; and *Randamarcotta* appears as a compound of both. *Amara* signifies the immortal gods; and *Rád'han*, or *Rád'há*, are rendered in Lexicons, by *(Amalaci)* pure, *(prápti)* complete, perfect, resplendent. Thus *Rádhámmara-pura*, or *Rádhamara-pura*, will signify the city of the pure and immortal gods. Instead of *Radhámra-pura*, we may say *Rádhámara cota*, or the fort of the pure and immortal gods. *Amar-pur*, *Amar-cote*, *Amar-ganh*, are generally used, the one for the other, in *India*. Before it became the capital of a vast empire, and in the beginning, it was probably called *Amara-cote* in *India;* but now it would be improper to say *Amara-cote*, unless it were sanctioned by usage. The distance of *Randamarcotta* from *Salatha*, in PTOLEMY, corresponds pretty well; but the proportional distances seem to point to some place much nearer. *Randamar-cotta* is obviously the name of a city;

* NONN. Dionys. lib. 26. v. 87.

but, from PTOLEMY's context, it was also the name of an extensive country, the capital of which is called *Nardos*, perhaps from *Aniruddha*, or from *Náreda;* for there are in *India* places called *Anurodgur*, and *Náredcote*. *Nardos*, or *Nardon*, is perhaps a corruption only from *Rádhán*, the old name of *Amarpuri*, according to COL. SYMES. As the *Spike-nard* does not grow in the countries to the east of the *Burrampooter*, according to MR. BUCHANAN's information, no alteration is to be made in this passage from PTOLEMY.

From the metropolis of *China*, says PTOLEMY, there was a road leading to *Cattigara*, in the same country of *Cambodia*, in a S. W. direction.

The Royal road, from the banks of the *Indus* to *Palibothra*, may be easily made out from PLINY's account, and from the *Peutingerian* tables. According to DIONYSIUS PERIEGETES, it was called also the *Nyssæan* road, because it led from *Palibothra* to the famous city of *Nysa*. It had been traced out with particular care, and at the end of every *Indian* itinerary measure there was a small column erected. MEGASTHENES does not give the name of this *Indian* measure, but says that it consisted of ten stades. This, of course, could be no other than the astronomical, or *Panjábi* coss; one of which is equal to 1.23 British mile.

PLINY's account of this royal road is, at first sight, most extravagant, and, of course, inadmissible. But on considering the whole with due attention, we shall immediately perceive, that in the original, from which it was extracted, it consisted of two distinct accounts or reckonings: the first was, that of the intermediate distances between every stage; and the second contained the aggregate sum of these distances for every stage. PLINY, whose inaccuracy is notorious, selected out of them only

a few distances and stages, here and there; and I have presumed to present the whole, arranged in the following manner:—

	Rom. Mil.	
From the *Indus* and *Peucolais*, -		
To *Taxila*, - - - -	60	
Hydaspes, - - - -	omitted	120
Acesines, - - - -	ditto	omitted
Hydraotes, - - - -	ditto	ditto
Hyphasis, - - - -	49	390
There ended ALEXANDER's conquests, - - -		
and a new reckoning begins - - - -		
Hesidrus, - - - -	168	
Jomanes, - - - - -	168	omitted
Some add 5 miles, - -	-	- -
Ganges, - - - - -	112	ditto
Rodapha, - - - -	119	325
Calinipaxa, - - - -	167	500
Some say, - - 265		
Conflux of the *Jomanes* with the Ganges, - - - -	omitted	625
They generally add 13 miles (638) -	-	- -
Palibothra, - - - -	425	omitted

Here we have, first, 390 miles, from the *Indus* to the end of the conquests of ALEXANDER; and thence 638 miles to the conflux of the *Jumna* with the *Ganges;* making in all 1028 miles, for the distance from the *Indus* to *Allahabad.* These distances were given in the original in stadia, which PLINY reduced into miles, at the rate of eight to one mile; and, by turning again his miles into stadia, we may easily find out the original numbers. Thus, his 1028 miles give 8224 stadia, at the rate of eight to one mile. Again, these 8224 stadia, divided by ten, give 822.4 *Cós,* or 205.6 *yójanas,* equal to 1012 British miles; and MAJOR RENNELL, after a laborious and learned investigation, finds 1030 miles between the *Indus* and *Allahabad,* through *Delhi.* But the royal road,

according to PLINY, from the context, and more positively, according to the *Peutingerian* tables, passed through *Hastinapúr;* which gives an increase, between the *Indus* and *Allahabad*, of ten miles nearly, making in all 1040 miles.

MEGASTHENES gives twenty thousand stadia for the distance from the *Indus* to *Palibothra:* some read only ten thousand. Both numbers are obviously wrong; and STRABO tells us, that some, as PATROCLES, reckoned only 12000: and this was the true reading in MEGASTHENES' itinerary. These 12000 stadia are equal to 1476 British miles. Now, the distance from *Allahabad* to *Sàncri-gulí*, commonly called *Sàcri-gulí*, or the narrow pass, and answering, I should suppose, with regard to its distance from *Allahabad* to the western gate of *Palibothra*, several miles to the north, is 439 miles; which, added to 1040, give 1479 miles for the whole distance, from the *Indus* to *Palibothra*. The numbers, in PLINY, give only 11624 stadia, instead of 12000; and there is a deficiency of 376 stadia, or 46 B. miles; part of which must be added to 425, the distance from *Allahabad* to *Palibothra*, and the rest to the first sum of 390 miles in PLINY, which is certainly too short: and instead of CCCXC, in the text, I should propose to read CCCCX, or 410. Such transpositions of numeral letters are not uncommon in PLINY's text. This was the extent, says that author, of ALEXANDER's conquests, from the *Indus* towards the east. We must not suppose that they extended no further than the *Hyphasis*, which he crossed; for PHEGELAS, or PHEGEUS, was king of the country beyond the *Beyah*, and as far at least as the *Setlej*, if not as far as *Serhind*. He submitted to ALEXANDER with a good grace, and was graciously received by him. PHEGELAS was probably the name of the city he lived in, which is called to this day *Pag-wárah*, or *Pag-wálá*, *Phag-wárá*, and *Phag-wálá*, be-

tween the *Beyah and Setlej*. *Ser-hind* is neither a *Sanscrit* nor *Hindu* denomination; but it is an *Indo-Scythian* compound, and signifies the limits or borders of *Hind*. The *Cathrei*, or *C'hàtárs*, were a *Scythian* tribe, as we may safely conclude from their features and manners in the time of ALEXANDER, and even to the present day. The word *Ser*, or *Sereh*, is used in that sense in *Biducshan*, and the adjacent countries: and *Ser-hind* was probably the limit of the conquests of ALEXANDER, though he never was there himself, as well as of the Persian dominions in *India*; that part of which was called *Hodu*, according to the book of ESTHER: and that it was once so called, is attested by the natives to this day, who say that it was formerly called *Hud*.

As I intend to write expressly on the marches of ALEXANDER through *India*, (having all the materials ready for that purpose,) I shall now content myself with exhibiting an attempt toward the correction of the various accounts of this famous Royal, or *Nyssæan* road, from PLINY, the *Peutingerian* tables, PTOLEMY, and the anonymous geographer of *Ravenna*.

From the ferry of *Tor-Boileh*, or *Tor-Beilam*, (or the black *Beilam*,) on the *Indus*, to the westward of *Peucolais*, (now *Pucauli*, or *Bîr-wálá*, called *Pirhola*, in the maps, and *Parhe* in the *Peutingerian* tables,) to TAXILA, on the river *Suvarna*, (now the *Sone*, the *Soanus* for *Soanus* of ARRIAN). It is called in *Sanscrit*, *Tacshila*; and its true name is *Tacsha-Syála*, according to the natives, who call themselves *Syálas*. Its ruins extend over the villages called *Rubbaut* and *Pekkeh*, in MAJOR RENNELL's map of the countries between *Delhi* and *Candahár*. The royal residence is pointed out by the natives, at a small village near the river, and is called *Syála* to this day; and is a little to the north of *Rubbaut*. *Tac-Syála* having

been ruined at an early period by the Musulmans, it was rebuilt afterwards under the name of *Turruk-pehri;* and a *Perganah* of that name is mentioned in the *Ayín-Acberi.* But this last has met with the same fate as the former.

Thence to *Rotas* or *Ruytas*, called *Rhodoes* by NONNUS, in his *Dionysiacs*, who says it was a strong place. It is called *Rages*, for *Rates*, in the *Peutingerian* tables, and in the *Pura'n'as* its name is *Hrĭdu*, and that of its inhabitants *Hrĭdan.*

According to the *Peutingerian* tables, we have another route, which ought to join here. It comes from *Arni*, *Aornos*, or *Attock*, and goes to *Pileiam*, (which appears to be transposed; or *Ec-Bolima*, from *Ac-Beila*, or *Ac-Beilam*, or the white *Beilam*, sands or shores, and now called *Hazru*).

Thence to the ferry over the *Jailam* or *Béhat*, and *Alexandria-Bucephalos*, near which is a famous peak, called the mountain of the elephant, by PLUTARCH*. Its present name is *Bal*, *Bil*, or *Pil*, which, in Persian, signify an elephant. It is famous all over the western parts of *India* for its holiness, and its being the abode of numerous penitents; the chief of whom, as well as the deity of the place, is called BAL-NA'TH or BIL-N'ATH. It is generally called BAL-NA'TH-THILEH, or the mountain of the Lord BA'L; another name for it is *Joghion-di-tibbi*, or the tower of the *Joghis.*

Thence to the *Acesines* or *Chandra-bhága*, and the town of *Spatura* of the *Peutingerian* tables, called *Simtura* by the anonymous geographer, and probably

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* Plut. de flum.

the same with *Sadhora*. There appears to be a transposition in the numbers expressing the distances.

Thence to the *Hydraotes*, or *Rávi*, (the *Irávati* of the *Puràn'as*,) and the city of *Laboca* or *Lobaca*, mentioned by PTOLEMY, and which is the present *Lahore*. Its true and original name is *Lavaca* or *Labaca*, from LAVA or LABA, the son of RA'MA; and its present name is derived from *Lava-wára*, the place of LAVA or LABA. Its distance from *Sangalá* in PTOLEMY, with its name, have induced me to suppose that it is the same with *Lahore*, which is 53 miles to the east of the extensive ruins of *Sangala*, so called to this day; and the true pronunciation is *Sangalá*, not *Sangálá*. There are two places in PTOLEMY, one called *Laboca*, and the other *Labocla*, which I take to be the same place, the true name of which is *Labaca*; for the other is not conformable to the idiom of any of the dialects in *India*.

Thence to the *Hyphasis*, and afterwards to the *Zadadrus*, (the *S'atódara* or *S'atadru* of the *Puránas*, or with 100 bellies or channels;) and to the town of *Tahora*, in the *Peutingerian* tables (now called, with a slight alteration, *Tehaura*, and in the *Purán'as*, *Tihotra* and *Trigarta*; there SEMIRAMIS, or SAMI'DEVI', was born).

Thence to *Ketrora*, in the same tables, for *Cshatriwárá*, or *C'hetri-wárá*, the metropolis of a powerful tribe of *Cshetris* or *C'hetris*, who lived in a beautiful and woody country. The famous *Lacki Jungle*, or forest, is what now remains of these charming woods and groves. They are called *Cetri-boni* by PLINY, with the epithet of *Sylvestres*, or living in forests; and *Cshatrivana*, in *Sanscrit*, and *C'hetri-bán*, in the spoken dialects, signify the forest of the *Cshetris*: *C'hetriwárá*, or *Cotrora*, is now *Thanehsar*; in former times, the metropolis of these *Cshatris*.

Thence to the *Jumna* at *Cunjpoora*, and to the *Ganges* at *Hustinapoor*, or *Hastina nagara*, called in the West, and in the *Ayin-acberi*, *Wustnaur*, for *Hastin-nora*. It is the *Bacinora* of the *Peutingerian* tables, the *Bactriana* of the anonymous geographer, and the *Storna* of PTOLEMY. In the *Greek* original it was written BACTINOPA, *Bastinora*, altered afterwards into BACINOPA, and BACTPIANA, *Basinora*, and *Bastriana;* and the latter was mistaken for *Bactriana*. Indeed the *Greeks* could hardly write *Wustnore*, or *Wustinore*, otherwise, than OYACTINOPA, or BACTINOPA, *Ouastinora*, *Wastinora*, or *Bastinora:* they chose the latter. *Hastina-nagara*, commonly called *Hustiná-poor*, is about twenty miles S. W. of *Dárinágur*, on a branch of the *Ganges*, formerly the bed of that river. There remains only a small place of worship; and the extensive site of that ancient city is entirely covered with large ant-hills; which have induced the inhabitants of the adjacent country to suppose, that it had been overturned, or destroyed, by the *Termites*. In the *Peutingerian* tables we are presented with a route, leading, from *Hustinápoor*, into *Tibet:* the first stage of which is *Arate*, called *Heorta* by PTOLEMY, but transposed by him. It is *Haridwar*, of *Hardwah*, as it is corruptly pronounced by many: and in *Arate* and *Heorta*, we can retrace the original name *Hartoa*, or *Hardwah*. The second stage is *Pharca*, called *Paraca* by PHILOSTRATUS, in his life of APOLLONIUS; and placed by him in the mountains, to the north of the *Ganges*. Its present name is *Prágh*, often pronounced *Parágh*, generally with the epithet of *Déva*, or *Deo*, *Deo Prágh*, or the divine *Prágh*. It is in the country of *Srí-nagar*, on the banks of the *Ganges*, and is a famous place of worship.

On the road from *Hustinápoor* to *Allahabad*, PLINY places the town of *Rodapha*, called *Rapphe* by

PTOLEMY. Its present name is *Hurdowah*, or *Huldowah*; for both are equally in use.

The next stage, according to PLINY, is *Calinipaxa*, the true name of which was *Cálinì-basa*, implying its being situated on the *Cálinì*, a river which retains its ancient name to this day: but the town is now unknown.

The next stage is *Allahabad*, called the town of *Ganges*, (or *Gangapoor*,) by ARTEMIDORUS. All the intermediate distances, in PLINY, are erroneous, and inadmissible: thus he tells us, that from *Rodapha*, to *Calinipaxa*, there are 168 miles: but according to others 265; whilst some reckon 500. The distance, assigned by him, between the *Sutluj* and *Jumna*, amounts to 336 miles, which is a most gross mistake. The half, or 168 miles, reckoning from *Tahora* to *Cunjpoora*, is pretty near the truth.

From *Allahabad* to *Palibothra*, the road, it seems, did lie along the southern bank of the *Ganges:* and in PTOLEMY we find the following places. From *Allahabad* to the river *Tuso*, now the *Tonse:* and, eighteen miles from its conflux with the *Ganges*, in a S. W. direction, he places a town called *Adisdara*, probably the same with *Attersar*, or *Attersarour* in the same place; and, about one mile and half to the north of the *Tonse*. Thence to *Cindia*, now *Cauntee*, on the banks of the *Ganges*, and almost opposite to *Goopygunge*. But this place is out of the direct road: though it might not have been so formerly, on account of the continual encroachments and shiftings of the *Ganges*.

The next is *Sagala*, now *Mirzapoor*, and connected with another called *Sigala*, or rather *Sagala*, now *Monghir*. The present *Sanscrit* name of the former is *Vind'hyávásini*, from the Goddess of that

name, who is worshipped there, and who resides in the *Vind'hya*, or *Bind* mountains, as implied by her name. The common title of this tremendous deity, is BHADRA-CA'LI', or the beautiful CA'LI'; though she by no means deserves that epithet. This place is supposed to communicate with the other *Sagala* or *Monghir*, through subterraneous passages, opened by lightning; which sunk under ground at *Vind'hyá-vásiní*, and re-appeared at *Monghir*, at a place dedicated also to the same *Dévi*, though little frequented. This accounts for these two places having the same name in PTOLEMY; though these names are now entirely unknown to the *Hindus*. But BHADRA-CA'LI', and SU-CA'LI' are perfectly synonymous: the latter, however, is seldom used as an epithet of that deity, except when persons, either male, or female, are denominated after her; then they never use BHADRA-CA'LI', but they say SU-CA'LI'. *Mirzapoor* is sometimes called the *St'hán*, or place of BHADRA-CA'LI', which appellation is distorted into *Patrigally*, in the voluminous treatise of the religious ceremonies of different nations.

The other *Sagala*, or *Monghir*, is called *Mudgala* in *Sanscrit*, as I am told, in a derivative form from *Mudga*, its name in the imperial grant found there: for *Mudga-giri* signifies the hill of *Mudga*. In the *Deccan*, PTOLEMY mentions two places, nearly at the same distance from each other, one called *Petirgala*, and the other *Modogulla*. *Madighir*, or rather *Modu-gir*, is a very common name for places in the *Peninsula*, and also in other parts of *India*; as *Madugar*, near *Jaypoor*; *Matgar*, near *Cotta*, &c. The first part of this compound is found, in composition, with *pura* city, *giri* hill, *grĭha* fort, *vana*, or *bán* forest, &c. thus we have *Modu-pura*, *Modugiri*, *Modughir*, *Modu-vana*, or *Modu-ban*, &c. That *Monghir* was called *Mudga-giri*, *Mudgala*, and *Sagala*, is certain; and that *Mirzapoor* was denominated

equally, BHADRA-CA'L'I or *Petrigally*, and *Sagala*, is equally so; like the two places in the *Deccan*, called *Petir-gala*, and *Modogulla*, by PTOLEMY. In all the names of places, in which the word *Modu* is introduced, this word is uniformly interpreted *pleasing*, *charming*, from the *Sanscrit Moda:* thus *Modu-bán* signifies the beautiful grove: *Modwa*, the name of several rivers, implies their being delightful. Thus *Moda-giri*, or *Modu-gir*, in the spoken dialects, signifies the beautiful hill; *Modu-gali*, the beautiful pass: thus *Sancri-gali*, now *Sacrigulley*, implies the narrow pass. The word *gali* is not *Sanscrit;* but *Sancri* is derived from *Sancírn'a:* and innumerable instances might be produced, of compound names of places, and even of men, in which one word is *Sanscrit*, and the other borrowed from the spoken dialects. In this case *Modu-gali*, *Bhadra-gali*, and *Su-gŏli*, imply equally the beautiful pass, between a projection of the hills and the *Ganges*. Several places in *India* are denominated *Su-golley*, *Sugouley*, and *Sucouley*, from their being situated near a pass, either through mountains, or almost impervious woods. PLINY seems to suppose, that the Royal, or *Nyssæan* road passed through *Pacli*, or *Peucolais;* but this is highly improbable. It went directly through the ferry of *Aornos* or *Attock-Benares*, to *Nysa*. *Aornos*, or *Avernus*, is probably derived from the *Sanscrit Varan'asa*, pronounced *Benares* in the spoken dialects. Father MONSERRAT, who accompanied the Emperor ACBAR, in his expedition to *Cabul*, says, that that Emperor paid the greatest attention to the measurement of the roads, during his march; and that, instead of a common rope, he substituted *Bamboos*, joined together by iron links. He then says, that there were twenty-six and one fourth, of these *Cos*, to one degree: each *Cos* consisted, of course, of 13911. 77 feet, or 4637. 26 yards.

V. From *China*, says PTOLEMY, there were two

roads: one leading to *Bactra;* and the other to *Palibothra.* The author of the *Periplus* has strangely disfigured this passage, or a similar one, from some other author. He says, that wool (I suppose some particular kind of it), and silk, were brought by land from *China* to *Baroche*, through *Bactra*, or *Balkh;* and then, down the *Ganges*, to LIMYRICA. He certainly meant, that the goods were sent, part to the west, through *Balkh*, and part to *Palibothra;* and from the latter they were carried down the *Ganges*, and by sea, to LIMYRICA: this was, I suppose, the original meaning. The country of LIMYRICA is that of *Muru*, in the *peninsula;* called also, though improperly, *Mura*, *Mur*, and *Muri;* which, in a derivative form, becomes *Muruca* and *Murica;* from which, *Arabian* travellers made *Almurica*, and the *Greeks* LI-MYRICA. In *Sanscrit*, but more particularly in the spoken dialects, the derivative is often used for the primitive form. Thus they say, *Bengála* for *Benga:* and for *Lar*, they said *Larica*, a district in *Gurjarát.* With regard to this track, from *Magad'ha*, and *Palibothra*, to *China*, the *Peutingerian* tables afford us considerable light. From the *Palitæ*, the *Bolitæ*, and *Cabolitæ* of PTOLEMY, now *Cabul*, there was a road, leading through the mountains, north of the *Panjab*, and meeting another road from *Tahora*, in the same country, (still retaining the same name,) at a place called *Aris*, in the mountains to the north of *Hari-dwár.* These two roads are frequented to this day; and they meet at a place called *Khama-lang*, a little beyond what is called the *Eyes* of *Mansarovar;* which are three small lakes, and to the south of *Bindu-Sarovara*, or *Lancá* lake. This information I received from several natives, who had travelled that way. The road then goes to *Aspacora*, or *Asparaca*, a place in *Tibet*, mentioned by PTOLEMY: there it met with another from the *Gangetic* Provinces; and passing through *Parthona*, probably now *Kerten*, or *Kelten*, with the epithet

of *Ponjuling*, from which is probably derived the *Paliana* of PTOLEMY. This road, in the tables, ends at *Magaris*, corruptly for *Thogaris*, or *Thogara*, in PTOLEMY; and now *Tonker*, near *Lassa*, on the river *Calchew*, (called, in the *Peutingerian* tables, *Calincius*). The mountains to the north, are called by PTOLEMY, *Thaguri*, and the inhabitants of the country, *Itaguri*. These famous mountains still preserve their ancient name, being called *Tingri* to this day. The road, from the *Gangetic* provinces, is represented as coming from a place called *Carsania*, near the *Ganges*; and probably the *Cartasina* of PTOLEMY, now called *Carjuna*, near *Burdwan*. Between this, and *Aspacora* in *Tibet*, the tables place a town called *Scobaru*, which strange and uncommon name is still preserved, in that of *Cucshabaru*, (in the maps, *Cocsabary*,) near *Jarbarry*, to the north of *Dinagepoor*. *Cucshabaru* is the epithet of a giant, living in the mountains to the north of *India*. His real name was ST'HULO'DARA, and, from his insatiable and ravenous voracity, he is surnamed *Cucshábárá*, and he is often mentioned in the *Purán'as*. This was probably the rendezvous of the caravans, from *Taprobane*, or *Ceylon*; which, according to PLINY, went by land to *China*. RACHIA, the chief embassador of the king of *Ceylon*, to the Emperor CLAUDIUS, said, that his father had gone by land to *China*.

ABBE' GROSIER, in his description of *China*, says, that at *Pou-cul*, a village in *Yunnan*, on the frontiers of *Assam*, *Ava*, and *Laos*, people resort from the adjacent countries: but that the entrance is forbidden to foreigners, who are permitted to approach no nearer than the bottom of the mountains. There they exchange their goods for tea, the leaves of which are long and thick. They are rolled up into balls, somewhat like *tobacco*, and formed into masses, which are carried into the adjacent countries, and even to this day to *Silhet*.

This trade was carried on, exactly in the same manner, 1600 years ago, according to ARRIAN's Periplus. On the confines of *China*, says the author, there is a nation of men, of a short stature, with a large forehead, and flat noses. They are called *Sesatæ*, (and by PTOLEMY *Basadæ*). These come, every year, to the frontiers; not being permitted to enter the country. They make baskets of certain leaves, as large as those of the vine, which they sew together, with the fibres of *bambus*, called *petri*; and fill them with the leaves of a certain plant, rolled up into balls, which are of three sorts, depending on the quality and size of the leaves; and are of course denominated balls of the larger, middle, and smaller size; and are carried all over *India*. *Petri* could not be the name of the *bambus*, but of the leaves, called in Hindu *pátrá*. These leaves are probably those of the *Dhác* tree*, used all over India to make baskets, and made fast together, with skewers, from the fibres of the *bambu*, or other similar plant. These *Basadæ* were, in my opinion, a wandering tribe, still called *Bisáti* †, who live by selling small wares and trinkets; for which purpose they constantly attended markets, fairs, and such places, where they think they can dispose of their goods. These *Bisáti*, or *Besadæ*, from their features, must have belonged to some of the tribes living on the eastern borders of *Bengal*, whose features are exactly such as described by the author of the *Periplus*. MR. BUCHANAN mentions two places called *Palé*, perhaps *Pou-eul*, and *Palaung*, in the mountains to the N. E. of *Ava*, where they pickle the tea leaves, used all over the *Burman* Empire.

There is another route, in the *Peutingerian* tables, leading from *Tahora*, (or *Tahaura*, in MAJOR REN-

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* Butea frondosa.

† See Asiat. Researches, Vol. 7th. p. 466.

NELL's map,) to *Elimaide*, or *Patna*. From *Tahora* to *Palipotra*, 250 *cos*: to the *Ganges* 500: to *Elymaide*, 250: in all 1000 *cos*, or 1228 B. M. Here we see, that *Palipotra* cannot be, either *Patna*, or *Ràjamahl*: besides, the distance is too great, in a direct line. There are three towns, thus called, in *India*: the first, or *Pali-putra* near *Cabul*, called *Palpeter* by DANVILLE, is unconnected with this route. The second is *Báli-putra*, or *Ràjamahl*, which is too far to the eastward. The third is *Páli-putra*, in the interior parts of *India*, and is now called *Bo-Pál*, for *Bhu-Pála*. It is mentioned by PTOLEMY, under the name of *Siri-Palla* for *Sri-Palli*. This, I conceive to be the *Palipotra*, of the *Peutingerian* tables, and accordingly propose the following correction. From *Tahora* to *Palipotra*, or *Bopaul*, 500 *cos*, or 639 B. M. Thence to *Elimaide* or *Patna*, 500 *cos*. also. Between *Tahora* and *Palipotra*, the route passed near the mountains of *Daropanisus*, which are those of *Dhár*. Between *Palipotra* and *Patna*, there is a station *ad Gangem*, or near the *Ganges*: this station, I take to be *Allahabad*, called the town of *Ganges*, in ancient authors: but then the distances, either according to our correction, or without it, do not agree so well; and probably there is a transposition.

I have mentioned before, the constant intercourse, both by sea and by land, between the kingdom of *Magad'ha* and *China*, on the authority of *Chinese* History; and their trade, to an island and kingdom, called *Founan*, to the eastward of *Siam*, during the third and fourth centuries. This was probably a *Malay* kingdom: but we cannot ascertain its situation. It seems that some *Malay* emperors, and kings, as those of *Zápage*, and *Founan*, did what they could, to introduce trade and learning, into their dominions: but their exertions proved ineffectual; at least they were not attended with much success;

and their subjects soon relapsed into their former mode of life. The Mohammedan travellers of RENAUDOT, speak of the power of the kings of *Mábed;* and declare, that they used to send, every year, embassadors to the Emperor of *China*, with presents: but that these embassadors were narrowly watched, on their entrance into the *Chinese* territories. They lived in peace with *China*, but were not subjects of its monarchs. These travellers consider *Mábed*, and *Mujet*, or *Maied*, as distinct countries: and there are some grounds for it; and it was perhaps so originally. The inhabitants of *Asam* were divided formerly, into *Cuj* and *Muj;* and the appellation of *Mujet* may be derived from *Muj*, whom I suspect, however, to be the same with the *Magas*, or *Burmahs*, who greatly imitate the *Chinese* manners. Thus, for *Magog*, they say *Magiuge*. After the death of PULIMA'N, the whole country was thrown into confusion, according to the *Purán'as* and *Chinese* Historians, as we observed before. One of his chief officers, called OLONACHUN, seized upon the kingdom, but was made prisoner by the *Chinese* embassador, with the assistance of the Emperor of *Tibet*.

Then, say the *Paurán'ics*, the AND'HRA-BHRITYAS, or servants of the AND'HRA kings, set up for themselves: but one, more fortunate, surpassed the others in power: his name was RIPUNJAYA, with the title of VISVASPHURJI, the thunder of the world. He exterminated the remnants of the Barons or *Cshettris:* and filled their places with people of the lowest classes: he drove away also the *Bráhmens;* and raised, to the priesthood, men of the lowest tribes, such as the *Caivartas*, boatmen and fishermen, *Patus*, *Pulindas*, and *Madracas:* but these *Bráhmens* were no better than *Mlech'has*, or impure and base born men. These boatmen and fishermen, being used to

live upon fish, would never give up their favourite food, when raised to the priesthood: and their descendants, the *Bengal Bráhmens* live upon fish even to this day. The same circumstance is mentioned in the *Vishnu-Puráńa*. Then, aftewards, a *Guptavansa*, or obscure race, will reign all over *Anu-Gangam*, or the *Gangetic* provinces; some in *Sácéta*, (or *Oude*) others at *Padmávatí*, (or *Patna*;) *Prayág*, (or *Allahabad*) *Mathurá*, (or *Muttra*) and *Canti-puri*, (now *Cutwall*, nine *cos* to the north of *Gwalior*). Here no mention is made of *Gaur* in *Bengal:* and indeed, its kings are never noticed by the *Paurańics*.

VI. The following towns are placed, obviously, in the country of *Tibet*, by PTOLEMY, and in the *Peutingerian* tables. Their names are *Aris*, *Orosana*, *Aspagora* (or *Aspacora*,) *Paliana* (the same with *Parthona*,) *Thogara*, *Abragana*, *Ottorocoras*, *Solana*, with the river *Bautes* (or *Bautisus*). These are in the country of the *Batæ*, (or *Budtan*) seemingly limited to the districts round *Lassa;* which, it is highly probable, was originally the case. The situation of *Aris* is at the meeting of two roads; one from *Tahora*, and *Hardwar* (probably the *Eorta* of PTOLEMY;) and the other from *Cabul*, through the hills. From the nature of the country, there is every reason to suppose, that the place, where they met, has not altered its situation. *Thogara*, at the other extremity, and on the river *Calincius*, is obviously the present *Tonker*, on the river *Calchew*, near *Lassa*. The distance between *Aris* and *Thogara*, in the *Peutingerian* tables, arising from the intermediate ones, amounts to 175. But these cannot be miles, nor even *cos:* let us suppose them to be 157 *yójanas*, or 771. B. miles; which would be sufficiently accurate. From *Aris*, to *Orosana*, (the *Thubrassene* of the tables, and now called *Ari-jun*,) 40 *yójanas*, or 196 B.

miles. Then, leaving *Kheiron* (the *Chiron* of the maps,) to the right; the route proceeds to *Aspagora*, of which the present situation is unknown: distance 52 *yójanas*, or 255 miles. Thence, to *Parthona* (probably *Carthona*, or *Calthona*, and, of course, the town of *Kelten* or *Kerten*, on the *Sampu*:) distance 15 *yójanas*, or 73 B. miles. According to PTOLEMY, the horizontal distance, between *Aspacora* and *Paliana*, is 47 B. miles; which, in a mountainous country, like this, must be greatly enlarged, to bring it into computed distance. *Kelten* is called also *Punjulin*, according to my friend, the late PURANGI'R, who accompanied the LAMA to *China;* and who greatly assisted me, in ascertaining the true pronunciation of the names of places in *Tibet*. *Paliana* is probably derived from *Ponjulin;* and *Parthona* (or rather *Carthona,*) from *Kelten*. From this place to *Thogára*, (or *Tonker*,) 50 *yójanas*, or 245 B. miles: and the horizontal distance, according to MAJOR RENNELL'S map, is about 150 B. miles. According to the *Peutingerian* tables, a route branched out, from *Aspacora*, towards *India* and the *Ganges*. About seventeen years ago, I had a long conversation with PURANGI'R, on the subject of *Aspagora*, or *Aspacora*. He told me, that *Gor*, *Khar*, and *Car*, were frequently used, in composition, in the names of places; and that *Aspa* might be a corruption from *Sipá*, or *Sápu*, which was a very common name of places, in *Tibet;* and that *Sipá-gor*, or *Sápu-gor*, *Sipá*, or *Sapu-khar*, were perfectly idiomatical; though he did not recollect any place of that name. It struck me then, that this was also the name of a famous river, in that part of *India*, mentioned by CTESIAS, under the names of *Sipa-c'horas*, *Hyparchos*, and *Hypobarus;* because it came, I suppose, from the country of *Sipa-c'hor*, in *Tibet:* the same is now called the *Teestah*, in *Bengal*. PHOTIUS has given us, in his *Bibliotheca*, an extract of this curious passage, from

CTESIAS, in general true, and correct, with a few wild and extravagant notions as usual with him. There is a river in *India*, about one furlong broad, or two stadia, called *Hyparcho*. PLINY, who had seen CTESIAS's works, long before PHOTIUS, says it was called *Hypobarus*, and flowed from the north into the *Eastern sea*, (or gulph of *Bengal*, called, by the *Paurán'ics*, the eastern, as that, between *Africa* and *India*, is named the *Western sea*). The mountains abound with trees, hanging over the numerous streams, which flow through them. Once a year, during thirty days, tears flow plentifully from them, which falling into the waters beneath, coagulate into *Amber*. These trees the Hindus call *Sipa-chora*. In the country, about the sources of this river, there is a flower of a purple colour, which gives a dye, not inferior to the Grecian, but even much brighter. There is also an insect, living upon these *Amber*-bearing trees, the fruit of which they eat; and, with these insects bruised, they dye stuffs, for close vestures, and long gowns, of a purple colour, superior to the Persian. These mountaineers, having collected the *Amber*, and the prepared materials of the purple dye, carry the whole on board of boats, with the dried fruit of the tree, which is good to eat; and then convey their goods, by water, to different parts of *India*. A great quantity they carry to the Emperor (the king of *Magad'ha*,) to the amount of about one thousand talents. In return they take bread, meal, and coarse cloth. They sell also, their swords, bows, and arrows. Every fifth year the king (of *Magad'ha*) sends them, as a present, a vast quantity of bows, arrows, swords, and shields.

This *Amber* of CTESIAS is obviously the *Indian Lacca*, which has many properties of the *Amber* or *Electrum*. Till very lately, authors differed, as to the production of this curious drug. Some imagined, that it was the indurated juice of some trees. Others,

that it was produced by a sort of insect. This last opinion is the true one: and these insects, being bruised, make a powder, as fine as Cochineal. These two opinions were current, in the time of CTESIAS, who, most injudiciously, has blended them together.

To the trees, he has given the name of *Sipa-c'hora;* and to the river, that of *Hyparcho*, or *Hypobarus:* but *Hyparc'ho* is but a corruption for *Sypa-c'hor*. *Sypobári* is the Hindu name, answering to the *Tibet* one of *Sypa-chor:* for *Bári* or *Barry*, as it is written in the maps, is very frequently used at the end of proper names of places, and signifies a limited spot of ground, an inclosure, and a garden.

It is more probable, that the river was thus called, because it came from the country of *Sipa-gor*, or *Aspacora*. CTESIAS says, it was a Hindu name; and yet, the meaning of it he attempts to derive from the *Persian*, as most of his other Hindu etymologies: but, though he had spent seventeen years in *Persia*, it seems, he understood that language but very imperfectly; and, I think, he was peculiarly fortunate in not forgetting his own. He accompanied the younger CYRUS, with the 10,000 *Greeks*, in the unfortunate expedition, in which that prince lost his life, in the year 401 B. C. CTESIAS was taken prisoner, and being a physician, became a great favorite with ARTAXERXES MNEMON. *Sipa-gor* was obviously on the road, between *Ari-jun* (or *Aridsong*,) and *Lassa;* and which, according to P. GIORGI, branches out into three, which reunite again at *Lassa*. It is tolerably well delineated in the maps of the LAMAS. The distance between *Sipá-c'hor*, and *Ponjulin*, as given, either by PTOLEMY, or in the *Peutingerian* tables, does not agree, being certainly too short. But when we consider that the geography of that country is yet in its infancy, and the want

of accuracy in PTOLEMY, and in the geographical works of the ancients, we shall not be surprised at it. It appears, however, that *Sibá-c'hor* was situated in the beautiful valley of *Tankya*, near the streams which form the *Teestah*. There is a place called *Sipá*, on the road, from *Napál* to *Lassa:* but it is too near *Napál*. PTOLEMY places it on the river *Bautes*, or *Bautisus*, now the *Bont-su:* though *Bot-su*, or the water of *Bot*, or *Bud-tan*, would be a very proper name for the *Sanpoo*. This, I believe, misled PTOLEMY, who places *Aspacora* on that river. The southern branch of this river, the real *Bautisus*, he derives from the country to the west of *Aridsong*, and makes it pass through the valley of *Tankya*. The town, called by him *Solana*, is probably *Ujulin*, called *Ujuk-link*, in the map of the LAMAS. Thus they call *Punjulin*, *Pusuk-liang:* but my friend PURANGI'R assured me, that the true pronunciation of it, in *Tibet*, is *Punjulin*, with a nasal *n* at the end. The name of the country of *Ottora-cora*, with a city of the same name, is pure Hindu: *Attáro-ghur*, the eighteen forts, or *Rájaships*. It is the country of *Napaul*, now called the 24 forts, or *Rájaships*. I am informed, that *Napaul* proper consisted, originally, of eight forts, or *Rájaships;* in Hindu, *At-ghur;* perhaps, the *Attacori* of PLINY: for the number of vassal Rájahs, and tributary forts to *Napaul*, must have been constantly fluctuating. But, let us return to CTESIAS, and his account of the inhabitants of the southern parts of *Budtan*, which will be found remarkably accurate, (though received into *Persia* 400 years B. C.) a few wild notions excepted.

These people, says he, inhabit the whole range of mountains, as far as the *Indus*, to the westward. They are very black, but otherwise remarkable for their probity, as the other Hindus are in general; and with whom there is a constant intercourse. They

live by hunting, piercing the wild beasts with their darts and arrows: but they are also so swift as to run them down. They have the head and nails of a dog, but their teeth are longer; and they bark like dogs, having no other language: yet they understand the Hindu, but express themselves by signs and barking. They have also tails like dogs, but longer, and more bushy. The Hindus call them *Calystrii*, or *Dog-faced.*

This idle story originates from their being swift-paced, and running down their prey like *Gre-hounds.* These *Dog-faced Sylvans*, are called *Swána-mu'chas*, in the *Puránas;* in which we read also of tribes, with faces like horses, parrots, &c. in these mountains. But it was, however, a very appropriate hieroglyph, by which to designate these people. Thus the *Icthyophagi*, or fish-eaters, on the coasts of *Persia*, are called in *Sanscrit*, I am told, *Sir-matsyas*, or fish-heads, and in Persian romances, *Ser-mahi;* which signifies the same thing. *Calystrii* seems to be derived from the *Sanscrit Cauleyaca-Siras*, or *Cauleyá-Siras*, with the heads of *Gre-hounds.*

They live upon flesh, dried in the sun: (and in *Tibet* they thus dry whole sheep, which they place upon four legs). The men never bathe: women only once a month. They rub their bodies with oil. (This is the practice in *Tibet*, and they use butter instead of oil). They generally live in caves: (this is the constant practice of the mountaineers, to this day, in winter: in summer, they live under tents, and in arbours). Their clothes are of skins, except a few of the richest, who wear linen.

Beyond the sources of the *Sipa-c'hora*, is a tribe of men, black also; but they have no evacuations. They however, make a little water occasionally. Their food is milk alone, which they know how to

prevent from coagulating in their stomachs. In the evening they excite a gentle vomiting, and throw up the whole. This strange narrative is not without foundation: many religious people in *India*, in order to avoid the defilement attending the coarser evacuations, take no other food but milk: and previous to its turning into *fæces*, as they say, they swallow a small string of cotton, which, on their pulling it back, brings up the milk, or those parts of it, which they consider as the *Caput mortuum*. This they make the credulous multitude believe: their disciples are ready to swear to it; and they have even deluded persons, otherwise of great respectability. I suppose they conceal themselves, with great address; and their evacuations cannot be very frequent, nor very copious; for they really live upon nothing else but a very small quantity of milk: but certainly more (at least I should suppose so) than they do acknowledge: and the ceremony of the string they perform occasionally, before a few friends. I have known many of these people: they are all hermits, who seldom stir from the place they have fixed upon. There is one near the military lines, at *Sicrowre*, near *Benares*, on the banks of the *Burna:* but, I believe, he is rather in too good case, for a man living upon so scanty an allowance.

The next place in PTOLEMY, is *Abragana*, placed by him to the S. E. or nearly so, of *Paliana*, and *Aspacora*. This I conceive to be the large district of *Bregion*, called also *Bramahsong;* extending from *Napál*, along the borders of *India*, and *Asam*, toward the east; and the capital city of which was called, also, by the same name. PTOLEMY places a famous city, about 350 geographical miles, horizontal distance, from *Thogara*, to the eastward, under the name of *Sera*, the metropolis: but of what country? of the *Seres?* no surely; for they are not introduced into his maps. It was obviously the metropolis of

Serica, a derivative word, from *Ser*, the name of *China*, to this day, all over *Tibet*, and implying a country subject to *Ser*. This *Será* is, much more probably, the ancient and famous city called *Dsiri*, *Siri*, and *Sera*, to the S. E. of *Lassa*. Its real name is *Cheri*, or *Tseri*, according to several pilgrims who had visited this famous place of worship. Between it and *Tonker*, PTOLEMY places, about half way, a town called *Dac-sata*, probably in the kingdom of *Tac-po*, between *Seri* and *Tonker*.

There is another *Bracmania*, or *Bragmania*, in the *Gangetic* provinces mentioned by PALLADIUS, in his account, in *Greek*, of the *Bragmans*. CALANUS and DANDAMIS came from that country; and the latter is introduced, reproaching CALANUS with his desertion, who could not remain satisfied with the pure waters of the *Tiberoboas*, or *Taberuncus*. This river was to the eastward of the *Ganges;* for DANDAMIS, or DAMA'-DAMIS, says, how can ALEXANDER be called the conqueror of the world, whilst he has not yet crossed the *Tiberoboas*, or *Tyberoboas:* let him only go beyond the *Ganges*, &c. The country of these sages was probably *Tirhoot*, in *Sanscrit*, *Tribucta*. This word has been distorted various ways, which have very little resemblance with their primitive and original form. The district of *Tirhút* consisted originally of three divisions; the first of which is called to this day *Tirhút*, or *Tyroot;* the second is denominated *Ti-Ru-hut;* and the third, *Ru-Ti-hut*. These words are also pronounced *Ti-Ru-buct*, *Ru-Ti-buct*. Thus *Sri-hut*, is now called *Silhet*, and by *Arabian* authors, *Sarirat*. *Tribucta* is derived from *Tri*, three, and *Bucta*, from a verb implying to foster; either because there were three *Rájas*, fostering the whole country, or one *Rája*, who alone fostered the three districts, and we may say either *Tribucta*, or *Tribhuc*.

Its capital city is *Durbungah*, by many derived from *Tir-bucta*, or *Tirbhuc*. From *Tirubucta*, and *Tirbucta*, the name of the river *Tiberoboas*, or *Taberuncus*, may, possibly, be derived. Some learned *Pandits* derive the etymology of *Dur-bungah* from *Dwára*, or *Dewar*, and *bangah*: because the *door*, or gate way, of the palace of the king, was destroyed by the river, during the rains; and the palace was in consequence forsaken, as it had been recently built. From *Dwára-bangah*, *Dewára-bangah*, synonymous with *Dewar-báha*, is probably derived the name of the river *Tiberoboas*, or *Tiberobancus*: for thus we should read in the original, instead of *Tiberancus*. The *Bragmania* of PALLADIUS is probably the same with the *Bracmania* of the anonymous geographer: for the greatest part of *Tribuct* is in the *Indian Serica* of that author, and, of course, belongs to the *Rájáship* of *Napál*. MR. DANVILLE was induced to suppose, that the country of BRAMSONG was the *Bracmania* of the anonymous geographer of *Ravenna*; because the French say, *Brámes*, instead of *Bráhmens*; *Tir-hut*, called also *Mit'hila*, and *Mait'hila*, is famous, from the most remote antiquity, for the learning of many *Bráhmenical* families, residing there even to this day. The appellation of *Bramsong* is probably derived from a colony of *Burmans*, settled there. The language of these mountaineers has much affinity with the dialect of the *Burmahs*, according to MR. BUCHANAN'S vocabulary. Their country is called, in the *Mahá-Bhárata*, *Varma-désa*, and placed in the east, seemingly, in opposition to *Sarma-désa*, or *Ethiopia*. The names of *Magad'ha*, or *Mabed*, have been distorted, by *Persian* and *Arabian* authors, into *Máber*, or the passage: because there is a passage through it to the adjacent countries: for the same reason, they have altered the name of *Lahaur*, into *Rahwer*, the road; because there is really a road through it. They say also, that the kings of *Mábed* were called BIRDOWAL; which

may be a corruption from VRISH-BALA, or VRIJA-BALA, pronounced in general, BRIJBALA', and BIRJWA'LA'. This was also one of the many names of BALIN, the founder of the *Dynasties* of the *And'hras*, and *And'hra-bhrityas*.

VII. From *Gaud'idèsa*, *Gaud'i-varsha*, or *Gaud-warsha*, its inhabitants are called *Gadrosi*, by ARRIAN: their country *Gandaris*, by DIODORUS the *Sicilian*, and *Goryandis*, by NONNUS in his *Dionysicas* *, and this last comes nearest to *Gaúri-désa*. This passage is really curious and interesting. The poet is enumerating the various nations which joined DERIADES, or DURYO'D'HANA, and MORRHEUS, the *Mahá-Rájá*, in the great war. Then came, says he, those, who live toward the east of *India*, in the populous country of *Encolla*, the abode of warlike AURORA, and in the divine *Goryandis*, with its well cultivated fields. After them came those who inhabit the country of *Oeta*, the mother of long lived elephants, ranging through its extensive forests. *Encolla* is the country of *Utcala*, now *Orissa*: formerly inhabited by a warlike race, at last extirpated by the CARN'AS, or kings of *Magad'ha*, according to the inscription on the pillar at *Buddaul*. UT-CALA, or UD-CALA, implies the great, and famous country of CALA: and, in the spoken dialects, as well as in *Latin*, UDCALA, may be pronounced *Uc-cala*, as *Ac-currere*, for *Ad-currere*. NONNUS gives to *Gaura-désa* the title of divine, from its capital city, which was originally a place of worship, in a forest, dedicated to the goddess *Gaúri*. From this circumstance, it is called *Corygaza*, by PTOLEMY, from the *Sanscrit Gaúri-ghosha*.

The country of *Oita*, or *Oëta*, is that of *Oude*, with forests in the northern parts, still abounding with

* Nonni Dionys. lib. 26. v. 294.

elephants. The town is situated on the *Gagra* or *Sarjew*, called after it, the river *Oëdanes*, or *Oude* river, by STRABO, who represents it as a large river, abounding with crocodiles and dolphins, and falling into the *Ganges*. The town itself is called *Athénagara*, or the town of *Athe*, by PTOLEMY. The geography of the countries to the north of the *Ganges*, in that author, is distorted in a most surprising manner; and every geographer since has been equally unfortunate, with regard to that country, till MAJOR RENNELL's time. All the ancient maps of *India*, in THEVENOT's collection of travels, and in other authors, are equally bad: and MR. DANVILLE's description of this tract is by no means superior to that of PTOLEMY; for he places *Canouge* below *Allahabad*. Fortunately, the names of these places in PTOLEMY, being very little disfigured, may be easily brought again into their proper order and situation. The town of *Athé* (or *Oeta*) is *Oude; Suan-nagura*, for *Suan-nagara*, is the *Nagara* or town of *Sewan*, in *Sircar Sarun: Cassida* is *Cási*, or *Benares*, with the mark of the genitive case, according to the idiom of the western dialects. Thus TAVERNIER calls *Sooty*, *Soutiki;* and other travellers use *Dacca-ca* for *D'haca*. *S'ailampura*, from the *Sanscrit S'ailam-pura*, or the *Stone-town* or *fort;* and in the spoken dialects, *Pattar-ghar*, is near *Hardwár*. The kings of *Gau'da* were not known till the declension of the empire of *Magad'ha:* until then they were vassals and tributaries. They extended, afterward, their dominions as far as *Allahabad*, and assumed the titles of *Mahárájas:* and *Bengal* is called *Maarazia*, or country of the *Mahá Rajá*, by NICOLO DE CONTI, who visited it in the fifteenth century.

Tradition says, that BUDDHA-SINHA, emperor of *Gau'da*, was in possession of *Benares*, at the time of the invasion of the *Musulmans;* and this is con-

firmed by an inscription found near *Benares* some years ago, and inserted in the fifth volume of the Asiatic Researches, but without a translation. It was written in the year of *Vicramad'itya* 1083, answering to the year 1026 of the Christian *era*. There it is said, that STHI`RAPA'LA, and his brother VESANTAPA`LA, the sons of BHUPA`LA, king of *Gaura*, had erected a most sumptuous monument, still existing, at a place called *Sarnáth*, near *Benares*. This monument of *Bhaudd'hist* kings is mentioned by TAVERNIER, who mistook it for a *sepulchral* monument of the kings of *Boutan*. S`THI`RAPA`LA is mentioned under the name of DHIRAPA`LA, in the list of the kings of *Bengal*, in the AYIN` ACBERI; by which it appears that they pretended to be descended from BHA`GADATTA, the son of NARACA, king of *Prágyotisha*, now *Gauhati*, beyond *Gualpara*, on the borders of *Assam*.

NARACA was put to death by CRĬSHNA; but he restored the kingdom to his son BHA'GADATTA.

VIII. The country of *Magad'ha* was thus called from the numerous families descended from the sage MAGA, the offspring of the sun, and the grandson of the venerable TWASHTA'H in the west. They came into *India* in the time of CRĬSHNA, at the request of his son SA'MBA. They settled in the province of *Cicáta*, now south *Bahar*. There are two tribes of *Bráhmens* in *India:* those of *Can`yácubja*, or *Canoge;* and the *S`acas* or *S`acalas*, thus called because they came from *Sácam*, or *Sáca-dwípa*. They are also called *Magas*, from their sire MAGA; and from them are sprung all the *Magas* (or *Mugs*) in the eastern parts of *India*, the *Burman* empire, *Siam*, and *China*. I shall give an account of their origin and emigration to *India*, when I come to treat of the White Island. The other *Bráhmens* in *India* are called *Can`yácubja*, because that was their first settle-

ment on their arrival in *India*. It is universally acknowledged, that the kings of *Magad'ha* gave every possible encouragement to learning, which they endeavoured to diffuse through all classes, by encouraging learned men to write in the spoken dialect of the country. Tradition says, that there were treatises on almost every subject in the *Magad'hi*, *Báli*, or *Páli* dialect, which are supposed to be still extant. I could not, however, procure any; and I believe that they were doomed to oblivion by the *Brahmenical* class, who by no means encourage the composing of books in the vulgar dialects. Should they exist, however, they are to be found among the followers of JINA: and MAJOR MACKENZIE says, that these sectaries are in possession of a great many treatises on different subjects. That this is the case here, I am credibly informed: but the JAINAS are not of a communicative disposition; and I hope that gentleman will find them more tractable in the *Peninsula*. From that circumstance the dialect of *Magad'ha* is become the *Sanscrit* of *Ceylon*, *Siam*, and the *Burman* empire, where it is called indifferently *Báli* or *Magad'hi*. CAPTAIN MAHONY writes that word *Magedee*; and MR. BUCHANAN, in his learned and interesting Essay on the Religion and Literature of the *Burmahs*, calls it *Magata*. Both say that it is the same with the *Báli*, or *Páli*, which last denomination prevails through the countries of *Ava*, *Siam*, and *Ceylon*, though hardly known in *India*, where they call it *Magadhi*. According to CAPT. J. TOWERS, the word *Páli* is written in *Aracan*, *Palit*, where the letter T has a very peculiar sound. The country of *Pali*, or of the children of PALI, or BALI, the same with MAHA-NANDA, according to the *Puránas*, included all the country to the south of the *Ganges*, from the banks of the *Soane* to the western branch of the *Ganges*.

The *Báli* characters, either square or round, are

obviously derived from the *Sanscrit*; but is doubtful whether, in their present state, they ever prevailed, or were used in any part of *India*. Among the numerous inscriptions in *Bahar*, only a few in that character have been found. One was kindly sent to me by Mr. Dick of the civil service. It was obviously written in the *Burmah* character, but I could not decypher it.

The *Bards* of *Magad'ha* were in great repute formerly, and they are mentioned under the name of *Magad'has*. They reckon three sorts of *Bards* in *India*: the *Magad'has*, or historians, thus called because those of *Magad'ha* were the most esteemed; the *Sutas*, or *Genealogists*; and the *Bandis*, whose duty was to salute, early in the morning, the king or chief, in selected phrase, and well-chosen words, wishing him long life and prosperity. The usual name in *India* for a *Bard* is, *Bhát*, vulgarly pronounced *Bhat*. It is not a *Sanscrit* appellation, though asserted to be derived from it. But the original name, as it was pronounced several hundred years ago, was *Bárdái* or *Bárdáhi*, though some think it a different name, applied to the same class of people.

Bhát, or *Bhat*, is derived from the *Sanscrit Várta*, or *Bar'tà*; and which is the same with the *English* word and the *German wort*, a word. In the west, *Bhats* were equally called *Bardi* in *Latin*, and *Bhardh* in *Welsh*. They were also called *Vates*, from *fari*, *fatus sum* in *Latin*, the same with *Vártá*, the letter R being dropped, as in the vulgar dialects of *India*. They were also denominated *Eubages*, from the *Sanscrit* verb *Vacha* or *Bacha*, to speak, which becomes *Uvácha* and *Ubacha*, through various moods and tenses. *Vacha*, or *Bacha*, becomes also *Bága*, or *Vága*; hence the Irish word *Bogh*, rendered *Logos*, or speech, by General Vallancey. The word *Bardai*, or *Vardai*, comes obviously from the same

root *Várttá ;* but my learned friends are of opinion, that it comes from *Bhár-dánam*, which signifies to *burden* with ; because they are *burdened* with the internal management of the royal household : and this is the case, to this day, in *Gurjarát ;* being next to the *Prad'hán*, or prime Minister (called *Pardon* by Mr. Lord), though independant of him.

The famous *Chandra*, or *Chanda-Bárdái* was *Bard* to Prĭthu-Ra'ja, King of *Dilli*, whose wars are the subject of an Epic Poem, in the spoken dialect of *Canoge*, and of some antiquity, since it is mentioned in the *Ayin-Acberi*. He was a favorite of Devi, and was *Tri-Cála*, knowing the past, present, and future. The title of *Bárdái* is translated musician by Abul Fazil*. His functions, both in the field, and at home, were exactly those of the ancient *Bards* in the west: except, that, in *India*, a real Bard sings only, but does not play upon any instrument; this being the office of musicians who do not sing. He took a most active part in the bloody war between Prĭthu-Ra'ja, and Jaya-Chan'dra, king of *Canoge*, and *Mahá Rájá* at that time, about a beautiful damsel given to the latter, by Vi'rabhadra, king of *Ceylon ;* when Jaya-Chan'dra went in person, at the head of a numerous army, to force him to become tributary, and vassal of the empire ; giving out, that he was only going to worship at the place of *Cárticéya-Swámí*, in the fort of *Sancara ghar* in *Sinhala*, or *Ceylon:* which place is resorted to, equally by orthodox Hindus, *Bauddhists*, and even *Musulmans*. He was accompanied by Carna-Daharya, king of *Magad'ha*. Prĭthu-Ra'ja waged a long and bloody war against Sultan Gori ; but was defeated, and lost his life, in the year 1192. Part of the poem, in which Prĭthu-ra'ja's wars with

* Ayin-Acberi. Vol. 2. p. 120.

JAYA-CHANDRA, and SULTAN GORI, are described, is in my possession.

The *Bards* of mortal men are not mentioned in any *Sanscrit* book that I ever saw: only those of the Gods. The *Sid'dhas*, the *Chárańas*, and the *Cinnaras* are the three classes mentioned in the retinue of the Gods, besides the *Puróhita*, or high priest: the regent of the planet JUPITER enjoys that high office, among the Gods; and S'UCRA, who presides over VENUS, among the giants. The SIDD'HAS are priests, and persons of uncommon learning and deep knowledge, to whom nothing is impossible. The *Chárańas* are really the *Bards* of the Gods: and were probably the same with the *Saron* class of Druids, called also *Saronides*. The *Cinnaras* are historians; and the *Chárańas* are also acquainted with the genealogies of the Gods, and of mankind. The bards of mortal men were also called *Chárańas*, according to ABUL-FAZIL. Every great man in India, had *Bhats* in his retinue: the practice is still kept up in *Gurjarát*; where they are highly respected to this day, according to my *Pandit*, who is a native of that country. The *Bhats* or *Bhactas*, and *Chárańas*, are mentioned by ABUL-FAZIL, in his description of *Subah Gujarat*. Their employment, says he, is to sing hymns, recite genealogies, and warlike songs in battle, to animate the troops. They acted also as heralds, as in the case of CHANDRA-BARDAI. ABUL-FAZIL makes some difference between the *Bhats*, and *Chárańas*: but my *Pandit* says, that he never knew of any, *Chàrańa* being really the *Sanscrit* word for *Bhat* or *Bhacta*. CHA'RANA, their ancestor, is said to have sprung from the sweat of MAHADE'VA, who intrusted him with the care of his OX NANDI, who resides in the white *Island*. But I am told, that, in the *Puráńas*, it is said, that they were born from the churning of the right arm of VE'NA, father of PRĬTHU or NOAH. *Bards*, in this part of *India*, being with-

out employ, are become a most despicable race of men. They are more respected in the *Deccan*, according to MAJOR MACKENZIE, who says, that they are generally called CAVÍSARS, from *Cávyéswaras*, or the Lords of the *Drama*.

The Merchants of *Magad'ha* formed not only a peculiar class, but also a particular tribe, called the *Magad'hì* tribe. It seems, that they were bold, enterprising, and at the same time cautious and circumspect: hence they are said to be merchants by the father's, and warriors by the mother's side, according to MR. COLEBROOKE's account of the Hindu Classes. According to the VISHNU-PURÁ'N'A, the kings of *Magad'ha* originally resided at a place called *Giri-Vraja*, or *Giri-Braja*. *Vraja* is synonymous with GHOSHA, a herdsman, also the abode of a herdsman: and being situated in the hills, it was called *Giri-vraja*. From that circumstance, the kings of *Magad'ha* were, till a very late period, called *Vraja-balas*, or rather, in the spoken dialects, *Vraja-wàlàs*, or *Braja-walas*, distorted afterwards by *Musulman* writers, into *Birdaoval*, according to HERBELOT, and *Birdawal* according to ABULFEDA; who says, that it was also the name of their metropolis. *Giri-Braja* was situated in the province of South *Bahar*, among the mountains of *Sivira*, now called the *Rája-gir*, or the Royal mountains: but more probably the real name was RÁ'JAGRÍHA, from a place of that name, implying the Royal abode. It is erroneously written, in MAJOR RENNELL's atlas, *Rargiara*. This is acknowledged to have been one of their places of abode: for they say, that the royal throne was at a place called *Asana*, above *Gáyá*, on the river *Balga*, now *Fulgo*, called *Cacuthis*, by ARRIAN. *Asana* signifies a Royal seat, or throne: and PTOLEMY mentions, also, a place of that name, *Asana mára*, or the destroyed throne. It is called *Pràcjyotisha* in the *Puráṅas*, and its remains are near *Go-háti*, on the frontiers of *Assam*.

There, among the *Rája-gríha* mountains, the unfortunate JARASAND'HA had a palace, near some hot springs, where he generally resided: some remains of it are to be seen to this day, and it is considered as a place of worship. The *Púját* is there performed, first in honor of CRISHNA, and the five *Pándavas*: then with flowers in honor of old SAND'HA, and his son SAHADE'VA. There, in memory of this unfortunate hero, martial games are annually exhibited. They are performed with clubs, whilst drums are constantly beating. I am informed, that there is a statue of him, of an ordinary size, and seemingly of great antiquity. He is represented naked, with a club in his hand. Formerly the same games were exhibited, in his honor also, opposite to *Patna*, in a small island, called, from that circumstance, *Sam-Mallaca*, and *Sambalaca* by PTOLEMY. They were then celebrated with great solemnity: people came from distant parts; and, during the time they lasted, a fair was held there. The games, the fair, and the place where it was held, were famous all over *India*, and the name of *Sam-Mallaca* became synonymous with *Pátalì-putra*. It is now called *Summalpoor* or *Sumbulpoor*, and, in MAJOR RENNELL's atlas, *Sabelpoor*.

From the manner in which JARA-SAND'HA is represented there, and also from other circumstances, he is fully entitled to the epithet of HERCULES or HARA-CULA, given to him by NONNUS in his *Dionysiacs*.

The *Sínhálas*, according to CAPT. MAHONY, say that BUDD'HA was born in the country of *Madda-desa (Magad'ha-desa)* in *Dumba-deeva (Jambu-dwípa,)* at a place called *Cumbool-wat-pooree, (Camalá-vatí-puri)*: and that he died at *Cooseemapooree (Cusumá-puri)* in the same country. *Camalávatí-puri* is the same with *Padmávatí-puri*, or the city of the *Lotos*; which we have seen is the same with *Cusumápuri*, now understood of *Patna*. It is added, that he

died at the court of king *Mallalel*, which should be *Mahá-ballala*, or *Má-vallala*, a very common name for kings. I have shewn before, that *Cusumápuri*, *Padmávatí*, *Camalá-vati-purí* are epithets, and not proper names of places; and applicable, and generally applied, to the place of residence of great kings. *Pátalí-putra* is never mentioned in the *Puránas*, or *Sanscrit* books of any antiquity; and its grammatical name is *Pátali-pura*. As it was the metropolis of the empire of *Magad'ha*, in latter times, and had also the emphatical name of *Padmá-vatí-puri* given to it; every transaction mentioned, as having happened at *Padmávatí*, was of course understood of the last known place under that name; and indeed, it was soon forgotten, that there were once several cities of that name in that country.

The *Magas* in *Bengal* are mentioned by PLINY under the name of *Macca-Calingas*. It appears from the context, that the upper part of the Bay of *Bengal* was divided into three parts, called in general *Calinga*, or the sea-shore in *Sanscrit*, from its abounding with creeks. West *Calinga* extended from the river of *Cuttaca* to the western mouth of the *Ganges*. In an island of the *Ganges*, *amplæ magnitudinis*, of very great magnitude, and of course the *Delta*, was a single nation called *Modo-Galica* and *Modo-Galenca*, from the *Sanscrit Madhya-Calinga*, or middle *Calinga*: then came the *Macco Calingas*, or the *Magas* of *Chittigong*, from *Maga-Calinga*. The *Magas* or *Mugs* maintained themselves as an independent tribe in the *Delta* for a long time; and they were at last expelled by the *Musulmans* and the *Rájas* of *Tipera*, about the beginning of the sixteenth century, as mentioned by P. MONSERRAT*. Through the *Bur-*

* Gens vero *Modo-Galica*, ü qui vulgo dicuntur *Mogi*, quamvis nostrâ memoriâ a *Patanicis* et *Tybreris* ultra *Balsaris* rivum pulsi *Arracani* consistunt. P. MONSERRAT de legatione *Mongolica*. Vol. the 1st. p. 19. a manuscript in my possession.

man empire, *Arracan* and in *Chittigong* the Priests only are called *Magas* according to Col. Symes: but in *Chittigong* and adjacent countries, the name of *Muga* is also attributed to the whole tribe.

ESSAY III.

Of the Kings of Magad'ha; their Chronology.

I. As the kings of *Magad'ha* were Lords Paramount, and Emperors of *India*, for above two thousand years; and their country the seat of learning, civilization, and trade; a Geographical and Historical description of this once famous country, cannot but prove both curious and interesting. By *Magad'ha* proper, South *Bahar* is understood: but, in a more extensive sense, it includes all the Gangetic provinces, and is by far the richest and best part of the British empire in *Asia*. It is also famous for having given birth to Budd'ha, and being, as it were, the cradle of the religion of one of the most powerful and extensive sects in the world.

The *Chronology* of its kings is connected with the period of the *Cáliyuga;* which consists of 432,000 years. This, the Hindus have divided into six unequal portions, or subordinate periods, called *'Sacas*, because they derived their origin from six *Sacas*, or mighty and glorious monarchs: three of whom have already made their appearance; and three more are expected. This system of the six *'Sacas*, with their periods, is thus explained in the *Jyotirvidábharána*, an astronomical treatise. Whatever man kills 550,000,000 *'Sacas* (a mighty tribe of heretics), becomes a *'Saca;* and whoever kills this *'Saca* only, becomes a *'Saca* also.

The first was Yud'hish tira, born on the *Saba-*

A TABLE OF THE KINGS OF MAGAD'HA, EMPEROR OF INDIA.

1370 | 1300 | 1200 | 1100 | 1000 | 900 | 800 | 700 | 600 | 500 | 400 | 300 | 200 | 100 | 0 | 100 | 200 | 300 | 400 | 500 | 600 | 700

JARA'SAND'HA,
SAHADEVA. PARICSHITA is born, Conclusion of the GREAT WAR. The CALIYUGA begins.

Sómádhi, - - - - - - - - 58—98—58
Srutasrava, - - - - - - - - 67—67—67

Ayutáyu, - - - - - - - - 34—36—34
Nirmitra, - - - - - - - - 50—63—50
5 Sucshétra, - - - - - - - - 50—50—50
Vrihatcarma, - - - - - - - - 23—23—23
Soúnjit or Manishi, - - - - - 50—50—50
Srutanjaya, - - - - - - - - 35—40—35
Mahá-hálu, - - - - - - - - 28—35—28
10 Suchi, - - - - - - - - 58—58—58
Cshéma, - - - - - - - - 28—28—28
Suvrata, - - - - - - - - 61—64—64
Dharmasúthéra, - - - - - - - - 5— 5— 5
Nribhrata, - - - - - - - - 58—58—58
15 Sunita, - - - - - - - - 38—38—38
Vrihadéna, - - - - - - - - 43—43—43
Sumati, - - - - - - - - 33—33—33
Suddhanwa, - - - - - - - - 32—32—32
Sunétra, - - - - - - - - 40—40—40
20 Saptajit, - - - - - - - - 30—30—30
Viswajit, - - - - - - - - 35—35—35
Ripunjaya - - - - - - - - 23—23—23
Pálaca, - - - - - - - - 24—24—24
25 Ajáca, - - - - - - - - 21—31—21
Cshéma-dharma, - - - - - - - - 20—20—20
Cshétranja, - - - - - - - - 40—40—40
Vidhisára, - - - - - - - - 28—28—28
AJATA-SATRU, - - - - - - - - 35—25—25
30 Dársaca, - - - - - - - - 35—25—25
Udási, - - - - - - - - 33—33—23
Nandi-vardhana, - - - - - - - - 42—42—42
Mahá-Nandi, - - - - - - - - 43—43—43
MAHA-PADMA, or Mahá-Nanda - - - - - - - - 28—28—28
35 The Nine NANDAS, - - - - - - - - 12—12—
CHANDRA-GUPTA, 315 B.C. - - - - - - - - 24—24—
Várisára, - - - - - - - - 25—25—25

DYNASTIES *in the western parts of India, toward the Frontiers of Persia*

X. ABHIRAS, *or Shepherd Kings, toward the upper parts of the Indus about Atac-Varànesa.*

Inferior Dynasties *in various parts of India generally in a state of independence.*

SUNACAS

X. SACAS, *or* PERSIANS

1 Ieshwácavas *in Cach'ha-Bhoja and the lower parts of the Indus* - 24 *Kings*
2 Panchálas *in the western parts of Oude* - 25
3 Cashayas *Benares*, - - - - - 24
4 Halhayas *Narmadá*, - - - - - 24
5 Canravas, - - - - - - - - 26
6 Calingas *Deccan*, - - - - - 32
7 Maithilas *Tirhoot*, - - - - - 28
8 Surasénas *Muttra*, - - - - - 23

XIV. TUSHARAS, *or* PARTHIANS

VIII. YAVANAS, *or Grecian Kings of Bactria.*

Asaca, - - - - - - - - 36—56—36
Gúdara, or Gúdila, - - - - - - 8— 8— 8
Bhúti-nanda, or Sammati, - - - - 40 - 8— 8— 8
Indra-pálita, or Sálisuca, - - - - 13—14—13
Déva-dharmá, - - - - - - 7— 7— 7
Sóma-Sarma, - - - - - - 7— 7— 7
Satadhanwa, - - - - - - 8— 8— 8
Vrihadratha, - - - - - - - - 87— 7— 7
Pushpamitra, - - - - - - - - 36—60—36
Agnimitra, - - - - - - - - 81— 2— 2
Vasumitra, - - - - - - - - 14— 7— 10
Udáshita, - - - - - - - - 13—10—11
Pulindaca, - - - - - - - - 2— 2— 2
Ghósha-rája, - - - - - - - - 3— 3— 3
Vajramitra, - - - - - - - - 14—14—14
Bhágavata, - - - - - - - - 32—32—32
Dévabhúti, - - - - - - - - 10—10—10
Vasudéva, - - - - - - - - 10—10—10
Bhúmitra, - - - - - - - - 14—24—14
Nárayana, - - - - - - - - 12—12—12
Susharmá, - - - - - - - - 10—10—10

XXV. SACAS, *or* INDO-SCYTHIANS.

9 Viti-hotras - - 20
10 Coshalas, - - - 9
11 Mecalas *Narmadá*, 13
12 Asmacas - - - 20
13 Meg'has,
14 Comalyas,
15 Nalavansas,
16 Naishadhas, - - 9
17 Mauridhányajas,
18 Canacávayas, *in Gurjerat', it is supposed.*

XIII. MAURUNDAS, *or* HUNAS, *a branch of the* Indo-Scythians; *the Morunda of* PTOLEMY.

19 Poundracas, *or* Tamralíptas, } *Tamlook,*
20 Maheshacas,
21 Melindras,
22 Bhaumas,
23 Naimishicas,
24 Caulateyas,
25 Strí-rájyas,
26 Mushicas, *Mashek Malabar coast*
27 A'ryyas, *Christian Kings in the Deccan.*

Dynasty of the genuine ANDHRAS omitted

XI. MAUNAS *unknown; probably a branch of the* Hunas.

28 Adrijas, *among the mountains in the western parts of the Deccan,*
29 Calacas, &c.

PAURAS, PAWARAS *or* Puwaras, Puwaras, *or country called the Kingdom of* Bourou, *by early Musulman writers.*

VII. GARDABHINAS
or the offspring of the Ass, *called* Bahram-Gur, *by the Persians, and* Gandarupa *by Hindus.*

From this last is descended the
VINDHYA-SACTI, *or the Might and Glory of the* Vindhyan *hills, the family of the Rajas of* Udaya-puta *and* Chaitor.

SRI-CARN'A DE'VA, or Sipraca, 109 - 23—13—
Crishna, his brother Srí, - - - 10—17—
Purpórsanga Srí Carná, - - - 56—55—
Lambódara, - - - - - - - 18— —
Ayilaca, - - - - - - - - 12— —
Saudása, or Mégha-swáti, - - - 13— —
A'ttamán, or Puttumán, - - - - 24—12—
Hála, or Háleya, - - - - - - 23—28—
Pulaca, - - - - - - - - 5— 5—
Pravilaséna, - - - - - - - - 21—12—
Sundara Srí Carná, - - - - - 1— —
Charóra Srí Carná, 6 months - — 6—
Meléndra Srí Carná, - - - - - — 3—
Cuntala Srí Carná, - - - - - — 8—
Siva-Swámi, - - - - - - - - 23— 1—
GAUTAMIPUTRA, first year 300 A.C. - 21— 3—
Madasára, - - - - - - - - — 4—
Siva Scanda Srí Carní, - - - - — 3—
Yajnasri Srí Carrí, - - - - - 29—19 (60)
Vijaya - - - - - - - - - —
Chanthasri, - - - - - - - - 3— 3—
PULIMAN dies, 648 A.C. (99) 7— 7—

Sr̆inga, or mountain with an hundred peaks, at the extremities of the world; beyond which no body can go; his period lasted 3044 years. Then came the *Era* of VICRAMA'DITYA, the second *'Saca*, which lasted only 135 years. He was born at *Támrá-vatí-nagari*, or the town abounding with copper. It is called *Trambá*, or *Tambá-vati*, in the spoken dialects. It no longer exists, having been overwhelmed with a deluge of sand. It was near *Cambát*, thus called from a place of worship, denominated *St'hamba-tirt'ha*, or with a *St'hamba* or pillar, called, in the spoken dialects, *Camba*. From *St'hamba*, the *Greeks* made *Asta*: and from *Támra*, (*Tramba*,) they made *Trapera*, *Campra*, and *Copra*, *Copper*: and, as these two places are contiguous, they said *Asta-Trapera*, *Asta-Capra*, *Campra*, &c. Sometimes they represented them as two distinct cities.

The third *'Saca* was SALIVAHANA, born at *Sàleyá-Dhára* in the *Deccan*; and his period will last 18,000 years. The fourth *'Saca* will be VIJAYA'BHI NANDANA, who will be born at *Su-Chitra-cút'a*: his period will last 10,000 years. Then, at *Rohita* (or *Rotas*,) will be born NAGARJUNA; whose period will last 400,000 years. Then will re-appear the antediluvian BALI, who is to be born at *Bhr̆igu-gosha*, *Barigaza*, or *Baroach*: his period will last only 821 years; when a general renovation of the world will take place.

The Hindus have thought proper to connect their chronology with an astronomical period of a most strange nature. It is that of the seven *R̆ishis*, or seven *stars* of the wain, which are supposed to go through the *Zodiac*, in a retrograed motion in the space of 2700 years. They are at present in the Lunar mansion of *'Swáticà*, according to the most famous astrologers of *Benares*, who cautioned me against the erroneous opinion of other astronomers, in various parts of *India*, who insist that they are now in *Anurádhá*.

I requested an able astronomer to give me, in writing, an account of this wonderful revolution. This period, says he, is not obvious to the sight; but it does, however, really exist, being mentioned in old *Sástras*, and by holy *Munis;* and certainly the seven *Rĭshis* preside in every Lunar mansion, for a hundred years; and their presence, or rather influence, over it, is sufficiently obvious: and, according to SA'CALYA MUNI, their yearly motion is of eight *liptas*, or minutes.

In the *Varáhi-sanhita*, the *Vishnu-Purána*, and also in the *Bhágavata*, I believe, it is declared, that, at the birth of PARICSHITA, the seven *Rĭshis* had been in *Maghà* for four years, or 4905 years ago; and they were in *Purváshará* in the time of NANDA.

But in the *Brahma-Sidd'hánta*, it is declared, that they were then in *`Sravan'a*, which makes a difference of fifteen Lunar mansions, or 1500 years: so that, according to that author, the *Cali-yugá* began 2405 years ago, or 1600 years B. C. supposing the seven *Rĭshis* to be now in *`Swàticá*, in which they are to remain ten years more; but, if they are in *Anurádhá*, the *Cal-yugá* began 1400 years B. C. The author of the *Garga-Sanhita*, according to BHATTOTPA'LA in his commentary, seems to be of that opinion, when he says, that the seven *Rĭshis* were in *Maghá*, in the twilight between the *Dwápar* and the *Caliyuga*. In the *Lalloctád'hi-vridd'hi*, it is declared, that they were then in *Abhijìt*, or in the first of *`Sravana*.

The names of the seven *Rĭshis*, shining in the wain, are *Puláha*, or the star α; *Cratu*, β; *Atri*, γ; *Pulastya*, δ; *Angiras*, ε; *Vasisht'ha*, ζ; and, close to it is a small star, representing *Arundatí* his wife; the seventh is *Marichi*, or η. My friends insist that their motion is perceptible; and they shewed them plainly to me in *Swáticá*. Of this they wanted to convince me, by drawing a line, from that mansion

through the stars β and α of the great bear. When they are in *Maghá* then the line passes through this asterism and the stars δ and α. By these means they could see them in every part of the starry heavens. When NANDA was born, they were then in *Purvás-hádhá*, or about 400 years B. C. and he died 327, before the Christian *Era*. Astrologers watch carefully their motion, because their influence is variously modified through every mansion: and whatever new married couple see them in a fortunate moment, they are sure to live happy together for a hundred years. Hence, says the ingenious MR. BAILLY, we may safely conclude, that no body ever saw them in that propitious moment.

The period of the seven *Rĭshis* begins to be neglected in the more northern parts of *India*, because they are not always to be seen at the lucky moment; and, in their stead, they use DHRUVA, or the polar star: This star is often mentioned in the sacred books of the Hindus, and it is connected with their mythology; but has not long been near enough to the *Pole*, to be thus denominated after it: and for a long series of years, before, there was no DHRUVA or immoveable star. Be this as it may, DHRUVA, with his relations, shines in the lesser bear. In the *Yantra-ratna-válÿam*, this constellation is called the fish of DHRUVA-BRAHMA'NA'D'HICA'RA. It consists of thirteen stars: DHRUVA is in the mouth, and UTTANAPA'DA his father in the tail. The mouth is turned towards *Bharaní*, and its revolution is the same.

The wives of the seven *Rĭshis* are the PLEIADES, at least six of them; for the Hindus do not know that they were seven formerly. AGNI fell in love with them; but his wife, dreading the resentment of the holy *Rĭshis*, assumed their shapes and countenances, and thus personifying them, satisfied her husband's lust. She was however unsuccessful with regard to

ARUND'HATI', the consort of VASIS-TA, on account of her extraordinary holiness and sanctity. Soon after, some scandalous reports prevailed, and the six other *Rĭshis* dismissed their consorts, and drove them out of their places, within the *Arctic* circle. They were intrused with the education of young CA'RTICE'YA, who placed them in the *Zodiac*, after expelling *Abhijit*.

The PLEIADES, according to Mythologists in the west, were intrusted likewise with the education of BACCHUS, (who, according to MACROBIUS, was the same with MARS, or CA'RTICE'YA); and, on that account, he translated them into heaven. According to those writers, they suffered a real bodily pollution; and the seventh, says HYGINUS, left her sisters, and fled to the region of the heavens within the *Arctic* circle*; and this is the ARUNDHATI' of the Hindus.

I have not been able to ascertain whose daughters the consorts of the seven *Rĭshis* were: neither did the western mythologists agree about it; though they supposed, in general, that they were the daughters of ATLAS; but, as they never existed, it is a matter of little consequence. Thus we see, that, according to some, YUDHISHTI'R, or JUDHISHTER, lived 3100 B. C. and began his reign immediately after the *Pralaya*, or *flood*; like XISUTHRUS, or SISISTHRUS; whilst, according to others, he lived between the years 1500 and 1370 B. C. like SESOSTRIS.

The beginning of the *Cali-yuga*, considered as an astronomical period, is fixed and unvariable; 3044 years before VICRAMADITYA, or 3100 B. C. But the beginning of the same, considered either as a civil, or historical period, is by no means agreed upon.

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* Hygin. Poetic. Astronom. p. 471.

In the *Vishnu*, *Bráhmánda*, and *Váyu Puránas*, it is declared, that from the beginning of the *Cali-yuga*, to MAHA-NANDA's accession to the throne there were exactly 1015 years. This emperor reigned 28 years; his sons 12; in all 40; when CHANDRAGUPTA ascended the throne, 315 years B. C. The *Calí-yuga* then began 1370 B. C. or 1314 before VICRAMA'DITYA: and this is confirmed by an observation of the place of the Solstices, made in the time of PARA'SA'RA, and which, according to MR. DAVIS, happened 1391 years B. C. or nearly so. PARA'SA'RA, the father of VY'ASA, died a little before the beginning of the *Cali-yuga*. It is remarkable that the first observations of the *Colures*, in the west, were made 1353 years before CHRIST, about the same time nearly, according to MR. BAILLY.

In the same *Puránas*, it is also declared, that, from the *Dynasty* of the NANDAS, to king PULIMA'N, there would elapse 836 years. PULOMA', or LOMADI, called POULOMIEN, OULOMIEN, and OULOMIENTO, in the annals of *China*, died in the year 648, according to DE GUIGNES. This passage from the *Brahmán'da* is obscure, being in a prophetical style: the words are: 'From the birth of PARICSHITA to NANDA (I suppose his accession to the throne) there will be 1015 years: from NANDA to PULOMA' and the ANDHRAS, 836 years.' NANDA died 327 years B. C. and PULOMA in the year 648, according to the Annals of *China:* the difference is 975 years, instead of 836.

If we suppose that the 836 years are to be reckoned, from the end of the *Dynasty* of NANDA, instead of the death of their primogenitor, the numbers will agree perfectly well. This *Dynasty* lasted, either 137, or 139 years, according to the *Puránás;* which, added to 836, give exactly 975, the number of years required.

The accuracy of the annals of *China*, and the carelessness of the Hindu chronologers, are equally known; and, of course, the former must be our guide.

According to the BAUDD'HISTS, the ancient BUDDHA, or DHARMA-RA'JA, probably the same with YUDHISHTI'RA, manifested himself, or began to reign, 1367 years B. C. as mentioned in the *Ayin-acberi*. It will appear hereafter, that the DHARMA-RA'JA, the subordinate MENU of his *Calpa*, was really the MINOS of the *Greeks*: that CRĬSHNA, or RA'D'HA'-MO'HANA, was the same with RHADAMANTHUS, or RADHAMANES. MINOS could not have lived earlier than 130, or 140 years, before the Trojan war, which happened 1184 B. C. and the time of his death happened about 1320 years before the same *Era*. If the taking of *Troy* happened 1200 B. C. as some suppose, then MINOS died about the year 1330: and admitting, that the first year of the *Cali-yuga* was the 1370 year B. C. YUDHISHTI'RA, of course, died in the 1332; according to some who assert, that he died 38 years after the beginning of the *Cali-yuga*. Others say, that he lived 28, and even 8 years only, after the beginning of that period. The DHARMA-RA'JA of the *Bauddhists* lived 120, and MINOS 120 also, or 125 years, according to others. NONNUS, in his *Dionysiacs*, shews that JARA'-SANDHA, literally old SANDHA, *Mahá-rája*, of *India*, and whom he well describes, when he says, that MORRHEUS, the Emperor of *India*, who was called SANDES, was contemporary with MINOS; and his BACCHUS is the same with BHAGAVA'N, in the character of CRĬSHNA. Thus we have two *Eras* of the same event, (an inferior, and subordinate Cataclysm, or desolation,) one 1578, and the other 1370 years B. C. This desolation of the world was the deluge of DEUCALION, as I have shewn in my Essay on mount *Caucasus*: and they made use of the same

computation nearly with the *Paurânics*, for they say, that it happened 1529 years B. C. according to EUSEBIUS and the *Parian Chronicle*, and other authors: whilst the ablest Chronologers have shewn, that it could not have happened earlier than the year 1380 B. C. The *Greeks* had also four ages, like the Hindus; and the last, or *Iron age*, answering to the *Cali-yuga*, began some time before the *Trojan war*, and a little after the expedition of the *Argonauts* and DEUCALION. HESIOD laments very much, that he was born during that age of corruption and wretchedness. Thus the *Greeks* and the *Paurânics* themselves, in their more sober moments, agree perfectly about the beginning of the *Cali-yuga*, or *Iron age*.

According to the Institutes of MENU, we may place the beginning of the *Cali-yuga* about the year 1370 before CHRIST. For we read there, that men in the golden age lived 400 years; 300 in the next, or silver age: 200 in the brass one; and 100 in the *Cali-yuga*. These four ages are obviously to be reckoned from the *flood*; after which men, as far down as EBER, lived about 400 years: and then, regularly decreasing, till the beginning of the *Iron age*, or 1370 B. C. when we find that YUD'HISHTHIRA, CRĬSHNA, MINOS, and JUPITER lived about 100 years.

The followers of JINA place the beginning of the *Cali-yuga* in the year 1078 B. C. as we shall see hereafter. Their chronological system has of course, much affinity with that of SIR ISAAC NEWTON. Every *Pandit* will boast, that they have uninterrupted lists of kings, from the beginning of the *Cali-yuga*, to the *Era* of VICRAMA'DITYA; and even lower down, for the space of 3044 years: but what was my astonishment, to find in perusing the *Purâ-n'as*, that this was by no means the case, as it appears from the accompanying table, in which, one

list gives only 1718 years, and the other no more than 1672, from the first year of the *Cali-yuga* to the *Era* of VICRAMA'DITYA. In the third column, which I have made out of the shortest numbers in both lists, the sum total amounts only to 1409 years; from which we must deduct 36 years, for the supposed reign of PUSHPAMITRA, (for he did not ascend the throne himself, after having murdered his own sovereign; but resigned it to his son;) and there remain 1373 years: and the highest numbers in both lists give 1855. The first list is from the *Brahmánda*, and the second from the *Váyu-púrán'a*. In other *Purán'as*, the number of years, during which each prince reigned, is omitted; but the sum total of the reigns of each dynasty is recorded. From the first year of the *Cali-yuga*, to the death of PURANJAYA, they reckon 1000 years, for 22 reigns, or perhaps generations; which is inadmissible. From the first year of the *Cali-yuga* to the birth of BUDD'HA they reckon also 1002 years, including 23 generations: now Budd'ha was born 618 B. C. This places the first year of the *Cali-yuga* 1564 before the *Era* of VICRAMA'DITYA.

From the first year of the *Cali-yuga* to the death of PURANJAYA, they reckon 1000 years, as we have seen before: add to this,

	From the BHA'GAVAT,	From the VISHNU *Purána*,
for the SUNACAS, -	138	128
the SISUNACAS, -	360	362
MAHA'-NANDA, &c. - - - - -	-	-
to CHAND'RAGUPTA's reign,	100	100
	1598	1590
before CHRIST, - -	315	315
	1913	1905
Subtract, - -	56	56
Before VICR'AMADITYA,	1857	1849

It appears, that the SUNACAS and SI-SUNACAS were two branches of the same family: the first sat on the throne 128 years; but the sum of the reigns, in both dynasties, amounted to 362. MAHA'-NANDA and the SUMA'LYA'DICAS reigned only 40 years, instead of 100: and the whole may stand thus corrected, from the first year of the *Cali-yuga*, down to

1000 } the accession of CHANDRAGUPTA, or 315
362 }
40 } years B. C. There are 52 generations and
1402 } reigns mixed together, to fill up that space, or about 31 years for one reign; which calculation is too large. These different computations of the *era* of the *Cali-yuga* from the *Purán'as*, with the several corrections which they are susceptible of, I thought of the greatest importance to lay before the learned. In the two accompanying lists, the numbers, particularly in the beginning, are obviously too large, either for generations or reigns, and of course they must be rejected. It is remarkable, that these numbers are pretty regularly decreasing, from 98 for a reign, in the beginning down to VICRAMA'DITYA, to three or four years. This regular decrease is equally inadmissible.

The first king of *Magad'a* was JARA'-SAND'HA; for that country began to be known under that name in his time, being before denominated *Cícata*. But JARA'-SAND'HA was not the first king of *Cícata;* his ancestors had ruled over it for many generations, at least from the time of VRĬHADRATHA, or VRĬHAT-RAT'HA; from whom the whole dynasty, as far down as PURANJAYA, or RIPUNJAYA, is denominated the dynasty of the *Bàrhadrat'has*, in a derivative form. They were descended from PURU, the fifth son of YAYA'TI, the son of NAHUSHA. We are told in general, that YAYA'TI divided his empire, the whole world, amongst his five sons. To PURU, the youngest

and his favourite, he gave *India*, or the middle part; to the others, who had incurred his displeasure, he allotted inferior kingdoms. To YADU, the ancestor of CRĬSHNA, he gave the south, by which they understand the *Deccan* or *Peninsula*. The north to ANU, the east to DRUHYA, and the west to TURVASU; but this division does not agree with what we read in the *Harivansa*. Besides, as the *Bráhmens* acknowledge that they are not natives of *India*, but came from the N. W. and that *Canoge* was their first settlement; their ancestors, at that early period, surely could not yet have conquered India, or even made any settlement in it. The offspring of TURVASU, so far from settling in the west, is declared, in the *Harivansa*, to have settled in the southern parts of *India;* and in the tenth generation, including their *sire*, four brothers divided the *Peninsula* among themselves. Their names were PANDYA, CE'RALA, CO'LA, and CHO'LA; and this division obtains even to this day. CO'LA lived in the northern parts of the *Peninsula*, and his descendants are called COLES and COLLERS to this day; and they conceive themselves, with much probability, to be the aborigines of *India*, to which they give the name of *Coller* or *Colara*. Hence we read in PLUTARCH, that the *Ganges* was called formerly the *Calaurian* river; and the same author mentions a *Calaurian*, or *Hindu*, and a handsome damsel, called DIOPETHUSA, who was also a *Calaurian*, or native of *India*, or country bordering upon the *Calaurian* river *.

In the same manner, we find the posterity of ANU dividing the eastern parts of *India*, among themselves, under the names of *Anga*, *Banga*, *Calinga*, *Pundhra* (now *Tamlook*) and *Undhra* (or *Orissa*); and we are always reminded, that CRĬSHNA and the PA'NDAVAS came from the west, and their first settle-

* Plutarch. de fluminibus.

ments were on the banks of the *Hydaspes* or *Vitastá*, the country bordering upon which is called, by PTOLEMY, the country of the PANDOVI or PANDAVAS. CHRĬSHNA had a small estate near *Dwáraca*, in *Gurjarát*, where he generally lived.

The first kings of the *Dynasty* of the *Bárhadrat'has* being omitted in the table, are given here from the *Harivansa*. The famous UPARICHARA was the sixth in lineal descent from CURU; and his son was

VRĬHADRATH'A
CUSH'AGRA
VRĬSHABHA
PUSHPAVA'N
SATYASAHITA
URJA
SAMBHAVA
JARA'-SAND'HA.

JARA'-SAND'HA, literally old SAND'HA or SAND'HAS, was the lord paramount of *India* or *Mahá Rájà*, and in the spoken dialects *Mà-Ra'j*. This word was pronounced *Morieis* by the *Greeks*; for HESYCHIUS says, that *Morieis* signifies king in *India*, and in another place, that MAI in the language of that country, signified great. NONNUS, in his *Dionysiacs**, calls the lord paramount of *India*, *Morrheus*, and says that his name was SANDES, with the title of HERCULES. Old SAND'HA is considered as a hero to this day in *India*, and pilgrimages, I am told, are yearly performed to the place of his abode, to the east of *Gayá*, in south *Bahar*. It is called RAJA-GRĬHA, or the royal mansion, in the low hills of *Ràja-giri*, or the royal mountains; though their name I suspect to be derived from RAJA-GRĬHA. The *Dionysiacs* of NONNUS are really the history of the *Mahá Bhàrata*, or great war, as we shall see hereafter. A certain DIONYSIUS wrote also a history of the *Mahábhárata* in

* Nonn. Dionys. lib. 34. v. 197.

Greek, which is lost: but from the few fragments remaining, it appears that it was nearly the same with that of NONNUS, and he intitled his work *Bassarica*. These two poets had no communication with *India;* and they compiled their respective works from the records and legendary tales of their own countries. NONNUS was an *Egyptian*, and a *Christian*. The Dionysiacs supply deficiencies in the *Mahá-Bhárata* in *Sanscrit;* such as some emigrations from *India*, which it is highly probable took place in consequence of this bloody war.

JARA'-SAND'HA erected a *Jaya-sthamba* or pillar of victory at *Benares*. According to tradition, it was destroyed by the *Musulmans*, and the capital, the only remains of it, has been shewn to me. It stood near the *Ganges*, at the *Gaut*, or landing-place of JARA'-SAND'HA, as it is called to this day. These pillars are pretty numerous along the banks of the *Ganges*, and most of them are of very great antiquity. They were known to the *Greeks*, who called them the pillars of *Bacchus*.

The accession of CHAN'DRA-GUPTA to the throne, and more particularly the famous expiation of CHANACYA, after the massacre of the *Sumályas*, is a famous *era* in the Chronology of the Hindus; and both may be easily ascertained from the *Puránas*, and also from the historians of ALEXANDER. In the year 328 B. C. that conqueror defeated PORUS; and as he advanced*, the son of the brother of that prince, a petty king in the eastern parts of the *Panjáb*, fled at his approach, and went to the king of the *Gangaridæ*, who was at that time king NANDA of the *Purán'as*. In the *Mudra'-ráchasa*, a dramatic poem, and by no means a rare book, notice is taken of this circumstance. There was, says the author, a petty king of

* Diodor. Sic. lib. XVII. c. 91. Arrian also, &c.

Vicatpalli, beyond the *Vindhyan* mountains, called *Chandra-dása*, who, having been deprived of his kingdom by the YAVANAS, or *Greeks*, left his native country, and assuming the garb of a penitent, with the name of SUVI'DHA, came to the metropolis of the emperor NANDA, who had been dangerously ill for some time. He seemingly recovered; but his mind and intellects were strangely affected. It was supposed that he was really dead, but that his body was re-animated by the soul of some enchanter, who had left his own body in the charge of a trusty friend. Search was made immediately, and they found the body of the unfortunate dethroned king, lying as if dead, and watched by two disciples, on the banks of the *Ganges*. They concluded that he was the enchanter, burned his body, and flung his two guardians into the *Ganges*. Perhaps the unfortunate man was sick, and in a state of lethargy, or otherwise intoxicated. Then the prince's minister assassinated the old king soon after, and placed one of his sons upon the throne, but retained the whole power in his own hands. This, however, did not last long; for the young king, disliking his own situation, and having been informed that the minister was the murderer of his royal father, had him apprehended, and put to a most cruel death. After this, the young king shared the imperial power with seven of his brothers; but CHANDRAGUPTA was excluded, being born of a base woman. They agreed, however, to give him a handsome allowance, which he refused with indignation; and from that moment his eight brothers resolved upon his destruction. CHANDRAGUPTA fled to distant countries; but was at last seemingly reconciled to them, and lived in the metropolis: at least it appears that he did so; for he is represented as being in, or near, the imperial palace, at the time of the revolution, which took place twelve years after. PORUS's relation made his escape

to *Palibothra*, in the year 328, B. C. and in the latter end of it. NANDA was then assassinated in that year; and in the following, or 327, B. C. ALEXANDER encamped on the banks of the *Hyphasis*. It was then that CHANDRAGUPTA visited that conqueror's camp; and, by his loquacity and freedom of speech, so much offended him, that he would have put CHANDRAGUPTA to death, if he had not made a precipitate retreat, according to JUSTIN*. The eight brothers ruled conjointly twelve years, or till 315 years B. C. when CHANDRAGUPTA was raised to the throne, by the intrigues of a wicked and revengeful priest called CHA'NACYA. It was CHANDRAGUPTA and CHA'NACYA, who put the imperial family to death; and it was CHANDRAGUPTA who was said to be the spurious offspring of a barber, because his mother, who was certainly of a low tribe, was called MURA, and her son of course MAURYA, in a derivative from; which last signifies also the offspring of a barber: and it seems that CHANDRAGUPTA went by that name, particularly in the west; for he is known to *Arabian* writers by the name of MUR, according to the *Nubian* geographer, who says that he was defeated and killed by ALEXANDER; for these authors supposed that this conqueror crossed the *Ganges:* and it is also the opinion of some ancient historians in the west.

In the *Cumáricá-c'handa*, it is said, that it was the wicked CHA'NACYA who caused the eight royal brothers to be murdered; and it is added, that CHA'NACYA, after his paroxism of revengeful rage was over, was exceedingly troubled in his mind, and so much stung with remorse for his crime, and the effusion of human blood, which took place in consequence of it, that he withdrew to the *Sucla-Tírt'ha*, a famous place of worship near

* Lib. xv. c. 4.

the sea on the bank of the *Narmadá*, and seven coss to the west of *Baroche*, to get himself purified. There, having gone through a most severe course of religious austerities and expiatory ceremonies, he was directed to sail upon the river in a boat with white sails, which, if they turned black, would be to him a sure sign of the remission of his sins; the blackness of which would attach itself to the sails. It happened so, and he joyfully sent the boat adrift, with his sins, into the sea.

This ceremony, or another very similar to it, (for the expense of a boat would be too great), is performed to this day at the *Sucla-T'irt'ha;* but, instead of a boat, they use a common earthen pot, in which they light a lamp, and send it adrift with the accumulated load of their sins.

In the 63d section of the *Agni-purán'a*, this expiation is represented in a different manner. One day, says the author, as the gods, with holy men, were assembled in the presence of INDRA, the sovereign lord of heaven, and as they were conversing on various subjects, some took notice of the abominable conduct of CHA'NACYA, of the atrocity and heinousness of his crimes. Great was the concern and affliction of the celestial court on the occasion; and the heavenly monarch observed, that it was hardly possible that they should ever be expiated.

One of the assembly took the liberty to ask him, as it was still possible, what mode of expiation was requisite in the present case? and INDRA answered, the CARSHA'GNI. There was present a crow, who, from her friendly disposition, was surnamed MITRA-CA'CA: she flew immediately to CHA'NACYA, and imparted the welcome news to him. He had applied in vain to the most learned divines; but they uniformly answered him, that his crime was of such a

nature, that no mode of expiation for it could be found in the ritual. CHA'NACYA immediately performed the CARSHA'GNI, and went to heaven. But the friendly crow was punished for her indiscretion: she was thenceforth, with all her tribe, forbidden to ascend to heaven; and they were doomed on earth to live upon carrion.

The CARSHA'GNI consists in covering the whole body with a thick coat of cow-dung, which, when dry, is set on fire. This mode of expiation, in desperate cases, was unknown before; but was occasionally performed afterwards, and particularly by the famous SANCARA'CHA'RYA. It seems that CHANDRAGUPTA, after he was firmly seated on the imperial throne, accompanied CHA'NACYA to the *Suclatírt'ha*, in order to get himself purified also.

This happened, according to the *Cumáricá-c'handa*, after 300 and 10 and 3000 years of the *Cali-yuga* were elapsed, which would place this event 210 years after CHRIST. The fondness of the Hindus for quaint and obscure expressions, is the cause of many mistakes. But the ruling epocha of this paragraph is the following: "After three thousand and one hundred years of the *Cali-yuga* are elapsed (or in 3101) will appear king SACA (or SA'LIVA'HANA) to remove wretchedness from the world. The first year of CHRIST answers to 3101 of the *Cali-yuga*, and we may thus correct the above passage: "Of the *Cali-yuga*, 3100 save 300 and 10 years being elapsed (or 2790), then will CHA'NACYA go to the *Suclatírt'ha*."

This is also confirmed in the 63d and last section of the *Agni-purána*, in which the expiation of CHA'NACYA is placed 312 years before the first year of the reign of SACA or S'ALIVA'HANA, but not of his *era*. This places this famous expiation 310, or 312 years

before CHRIST, either three or five years after the massacre of the imperial family.

My *Pandit*, who is a native of that country, informs me, that CHA'NACYA's crimes, repentance, and atonement, are the subject of many pretty legendary tales, in verse, current in the country; part of some he repeated to me.

Soon after, CHANDRAGUPTA made himself master of the greatest part of *India*, and drove the *Greeks* out of the *Panjáb*. Tradition says, that he built a city in the *Deccan*, which he called after his own name. It was lately found by the industrious and active MAJOR MACKENZIE, who says that it was situated a little below *Srí-Sálam*, or *Purvutum*, on the bank of the *Crishna*; but nothing of it remains, except the ruins. This accounts for the inhabitants of the *Deccan* being so well acquainted with the history of CHANDRAGUPTA. The authors of the *Mudrá-Rácshasa*, and its commentary, were natives of that country.

In the mean time, SELEUCUS, ill brooking the loss of his possessions in *India*, resolved to wage war, in order to recover them, and accordingly entered *India* at the head of an army; but finding CHANDRAGUPTA ready to receive him, and being at the same time uneasy at the increasing power of ANTIGONUS and his son, he made peace with the emperor of *India*, relinquished his conquests, and renounced every claim to them. CHANDRAGUPTA made him a present of 50 elephants; and, in order to cement their friendship more strongly, an alliance by marriage took place between them, according to STRABO, who does not say in what manner it was effected. It is not likely, however, that SELEUCUS should marry an *Indian* princess; besides, CHANDRAGUPTA, who was

very young when he visited ALEXANDER's camp, could have no marriageable daughter at that time. It is more probable, that SELEUCUS gave him his natural daughter, born in *Persia*. From that time, I suppose, CHANDRAGUPTA had constantly a large body of Grecian troops in his service, as mentioned in the *Mudrá-Rácshasa*.

It appears, that this affinity between SELEUCUS and CHANDRAGUPTA took place in the year 302 B. C. at least the treaty of peace was concluded in that year. CHANDRAGUPTA reigned four-and-twenty years; and of course died 292 years before our *era*.

III. After the decline, and ultimately the fall of the imperial house of NANDA, and of the *Báli-putras*, the most illustrious family that sat afterwards upon the imperial throne of *India*, was that of the AND'RHAS. From the *Báli-putras*, the inhabitants of the *Gangetic* provinces were denominated *Páli-bothras* and *Páli-potras*: in the same manner they were called, after the AND'HRAS, the AND'HRA *Indians*; these are the ANDRE-INDI, which lived along the banks of the *Ganges*, according to the *Peutingerian* tables.

The AND'RHA dynasty lasted 456 years: in the *Váyu-puráńa*, it is said 418; but some copies have 458. Be this as it may, the general opinion is, that it lasted 456 or 458 years. These deducted from 648, there remains 192, or 190, for the year of the inauguration of its first king, called BA'LIN, BALIHITA or BA'LEYA, CSHESHMACA, SIND'HUCA, 'SIPRACA, SUDRACA, and 'SURACA. In the *Cumáricá-c'harda*, it is declared, that after 3300 years, save 10, of the *Cali-yuga* were elapsed, a great king, called 'SUDRACA, would reign in *Chárchita*: the name of his metropolis is, however, omitted in many copies.

SUNDRACA, SIPRACA, or SIND'HUCA began then his reign in the year 191 of the *Christian era.*

From CHANDRAGUPTA's accession to the throne, 315 B. C. to the year 190 A. C. there are 505 years; but during this period the chronological particulars, from the *Puráńas*, are not to be easily reconciled with the general outlines which I have traced out. According to the *Puráńas*, there were ten *Maurya* kings, who ruled 189 years: these were succeeded by the *Sunga* dynasty, consisting of ten kings also, and VICRAMAMITRA was the eighth of that dynasty.

The next was that of the *Canwas*, consisting of four kings; then SUDRACA succeeded to the throne in the year 191. Thus we have six reigns, the last of the *Sunga* dynasty, and the four *Canwas* only, to fill up a space of 246 years; which is impossible.

These *Canwas*, are said to have reigned 345 years; which is still more extravagant. It is obvious, that there is some gross error in the context; to rectify which, in a satisfactory manner, can hardly be expected. It is my humble opinion, that a dynasty is omitted here; and that dynasty is that of the seven AND'HRAS, mentioned in the *Brahmánda*, *Váyu*, *Bhágavata*, and *Vishnu Puráńas;* but out of its place. In some *Puráńas*, the AND'HRA dynasty is made to consist of seven, and in others of nine, kings. In one it is said, that they reigned 300 years; in another only 250 years.

The AND'HRAS made a most conspicuous figure on the banks of the *Ganges* for above 800 years, under three distinct dynasties. The first was called simply the AND'HRA dynasty; and its kings were considered as pure and genuine AND'HRAS. The second dynasty is that of the AND'HRA-JA'TICAS, or of the family

or tribe of the AND'HRAS, but a spurious branch of it. The third is that of the AND'HRA-BHRĬTYAS, or servants of the AND'HRA sovereigns; who, after the death of PULOMA, seized upon the kingdom, and divided it among themselves. SIPRACA, or SURACCA, was the first of the AND'HRAJ'ATICAS; and the venerable PULOMA was the last. In the *Purán'as* no place is assigned, in the chronological lists of the kings of *Magad'ha*, to the first dynasty of the genuine AND'HRAS: except in one, in which they are placed immediately after PULOMA', who, it is well known, was succeeded by the servants of the AND'HRAS, not by the seven genuine AND'HRAS. In the *Bhágavata*, we read only, that the seven AND'HRAS would reign over the land. In the *Vishnupurán'a* they are not mentioned, unless they be the same with the COS'ALAS or CAUSALAS. In the *Brahmán'da*, they are introduced between PULOMA' and the AND'HRA-BHRĬTYAS in an obscure manner; and there the nine AND'HRAS with the AND'HRA-JA'TICAS are joined together in an immediate order of succession; and it is added, that there were thirty-six of them, nine genuine AND'HRAS, and twenty-seven belonging to a spurious branch of the same family; but it is not said which of them ruled first. Now, it is universally acknowledged, that the AND'HRA-BHRĬTYAS succeeded PULOMA'; and the fact being testified by the annals of *China*, no doubt can remain concerning this circumstance; and the seven or nine genuine AND'HRAS must of course be placed before the spurious branch, and immediately after the *Can'wa* dynasty. Thus we shall have either 13 or 15 kings, to fill up a space of 246 years. The occasion of this omission is, I believe, that the first kings of the AND'HRA and AND'HRA-JA'TICA dynasties, were prime ministers, and both put their masters to death, and usurped their throne. That SISUMAN, the last of the *Can'wa* dynasty, was put to

death by his prime minister, an AND'HRA, is acknowledged by every historian; and in the *Mahábhráta**, it is declared, that MAHA'-CARN'I, or 'SUDRACA, usurped the throne from his master, the king of *Magad'ha;* whom he confined, in a place, *amid* waters; from which circumstance, the venerable old man was called, by way of ridicule, *Ambu-vícha.* It is added, that the old king was blind and deaf.

The famous 'SRI'-CAR'NNA-DE'VA, in his grant, lately found at *Benares*, declares that he was of the *Haihaya* tribe, who lived originally on the banks of the *Narmadá*, in the district of the western *Gaùda*, or *Gaur*, in the province of *Málava.* Their residence was at *Chauli-Mahéswara*, a famous place of worship to this day, on the *Narmadá;* and built by one of his ancestors. The western *Gaur* was also the native country of a most respectable tribe of *Bráhmens*, called SANDILA; who, for several generations, acted as prime ministers to the emperors of the AND'HRA tribe. That this was their native country, is attested by *Major* MACKENZIE, in his account of the kings of *Warangal.* One of the thirty-six musical modes in *India*, and belonging to the superior RA'GA, or mode, called *Málava*, is denominated *Gaùdi*, from the country of *Gaùda*, which was part of the province of *Málava.*

They afterwards were called AND'HRAS, from the country of *And'hra*, on the coast of *Coromandel*, and extending from *Nellore* to the *Godaveri;* of which they became kings: but in what manner, and when this was effected, we do not know. They were called AND'HRAS in the time of the *Canwa* dynasty, about

* *Rájagrihé nagarè* Mágadhànàm Ràjà AMBUVÍCHA sa Caranaih chacshushàdihinah. Tasyàmàt *yó mahá Carni* íswary rajánam avamanyaté amátóádhína *iti carnoctih.*

the beginning of the *Christian era.* At that time, says PLINY, the AND'HRA, ANDARÆ kings, were very powerful in *India.* They had no less than thirty fortified cities, with an army of 100,000 men; and 1000 elephants. Their cavalry consisted only of 2000 men. SRI-CARNNA-DE'VA takes the title of king of *Tri-Calinga,* or of the three shores, to the east and west, and to the south of *India.*

There was another CARNA, mentioned in the *Mahá-Bhárata,* (section of the *Rájah-Dharma*) to whom JARA-SANDHA gave the city of *Malinì,* with the country round it, now the district of *Bhágleрoor,* called from him, the country of *Carna. Malinì,* in lexicons, is said to be the same with *Champá-nagari,* now *Champá-nagar* in that country. This CARN'A was the son of CANTÍ, the wife of PAND'U, who conceived by the sun; and, of course, CARNA is an incarnation of the sun. Tradition says, that the little kingdom of CARNA, now the *Bhágleрoor* district remained, for many generations, in the possession of the descendants of CARNA. This CARNA is totally unconnected with our CARNA, who likewise is of divine extraction, as one of his ancestors, CA'RTAVÍRYA, was conceived in a miraculous manner; and to this day, divine honours are paid to him, in the west of *India.* Hence, they all assumed the titles of 'SRÍ and DE'VA, as in 'SRÍ-CAR'NA-DE'VA, the fortunate and divine CAR'NA, and in 'SRÍ DE'VA-PA'LA-DEVA', whose original name was DEVA-PA'LA, answering exactly to the *Greek Theo-philos,* in which the word *Philos* is taken in a passive sense, as well as PA'LA, in *Sanscrit,* in the word DEO-PA'LA. In the compound 'SRÍ-DE'VA-PA'LA-DE'VA, the second DE'VA, is no part of the name, but a title. There is a living instance of such an hereditary divinity, near *Poona,* of which an interesting account is given in the seventh volume of the Asiatic Researches, in the family

of MURABAGOSSEYN, whose descendants add the epithet of DE'VA to their proper names, and the chief of the family is considered as a god. There is then every reason to believe that SRI'-DE'VA-PA'LA-DE'VA claimed equally a divine origin: and as he was originally from the same country *Gauda*, in *Málwá*, it is probable that he belonged to the same family.

For by *Gauda* we must not by any means understand *Bengal:* which, as far as I can recollect, is never thus called in any book I ever met with. Its metropolis is indeed called *Gaudí* from the goddess of that name, who was worshipped there: hence it is with propriety called *Gaurigosha (Corygaza)* by PTOLEMY. But *Gauda*, as the name of a country, does not seem to be in the least connected with that of the goddess *Gaudí*.

In the names of six kings, mentioned in the grant found at *Mongir*, we find the adjunct *pála*, which seems to be characteristic of that branch of the HAIHAYA tribe.

The HAIHAYA tribe, to which the AND'HRA family belongs, claims for their ancestor HAIHAYA, the son of the godlike YADU, and the grandson of NAHUSHA, or NOAH: MAHISHMA'N, the fourth in descent from him, built *Mahishmatí*, now *Chauli-mahéswara* on the *Narmadá*. The fourth descendant of the last mentioned was CRI'TAVI'RYA, whose son was the famous CA'RTAVI'RYA, to whom divine honors are paid to this day.

There is a dynasty of HAIHAYAS, mentioned in the *Puráńas*, who have no connection with the AND'HRA dynasty; and they are introduced as possessed of some district, the situation and name of which are omitted; but it was probably the country of *An-*

d'hra in the *Deccan*. A powerful tribe of these HAIHAYAS, according to the *Purán'as* (as I have been lately informed,) lived in the countries on the banks of the *Ganges*, in the time of king SAGARA; but in consequence of their ill behaviour to him and his son, he was obliged to drive them out of *India*, except a few, who held the conduct of their relations in abhorrence. Tradition says, that they withdrew to western countries, where it is added that they were better known under the names of *Párasicas*, *Asvamuc'has* or horse-faced, and that of *Asva pati* for the title of their kings. This traditionary legend originates probably from their name, HAIHAYA, implying horses, or horsemen: PLINY mentions a nation in *Persia* called HYI.

The CARN'A of the *Mahá-Bhárata*, to whom JAR'A-SAND'HA gave the country of *Bháglepoor*, cannot be the same, who dethroned the king of *Magad'ha;* for this king was blind and deaf, and the usurper was his prime minister: but JAR'A-SAND'HA was in the full enjoyment of his bodily faculties, when he was put to death by CRÍSHNA, or rather BHÍMA. The first is called CARN'A, and the usurper MAH'A-CAR'NI. This last is famous, all over *India*, and even as far as *Malaca*, and the adjacent islands, according to MR. MARSDEN; who says, that they have legends there, mentioning MAHA'-CARN'A, and a lion possessing surprising powers, and shooting arrows at him. This lion they call SINGA-SACTEE, (SINHA-'SACTI,) and SINGA-RAJOON (SINHA-RA'JA*). He is mentioned also in the grant of the king of *Tagara*, inserted in the first volume of the Asiatic Researches, and his munificence and liberality are there highly praised. King BHO'JA, in his address

* Asiat. Researches, Vol. 4. p. 22.

to RA'JA MUNJA, considers him and VICRAMA'DITYA as the two most powerful kings that ever existed. He is, for that reason, called AD'ITYA, and also RA'JA-VICRAMA: and in the *Agni-purán'a* VICRAMA'DITYA, the son of GAND'HA-RUPA, is positively declared to be CA'RN'A'NSYA, or descended from RA'JA'-CARN'A. This is, of course, the VICRAM'ADITYA mentioned by FERISHTA, as contemporary with SAPOR king of *Persia*, who ascended the throne in the year 241: and in some lists 'SURACA is said to have reigned 56 years. FERISHTA knew of no other VICRAMA'DITYA, but this; and some missionaries, who have fixed the death of VICRAMA and the beginning of his *era*, in the year 250, must have been misled by legends wholly relating to this VICRAMA'DITYA.

He is mentioned in the *Vrihat-cat'há*, under the name 'SUDRACA, or 'SURACA, among the several worthies, dignified with the title of VICRAM'ADITYA. In another section he is introduced as the prime minister of an emperor of *Pátalí-putra*, or *Patna*, who was labouring under various infirmities; when he was advised, by a mischievous *Bráhmen*, to avail himself of these circumstances, and usurp the throne; which he did, according to the *Puránás* and the *Mahábhárata*.

In the *Bhágavata*, he is called BALIHICA, or rather BALIHITA: in the *Vishnu-puráná*, 'SIPRACA; in the *Brahmán'da*, CH'HESMACA; in the *Váyupuráná*, SIND'HUCA: he was the first of the AND'HRA-JA'TIYAS. In the *Cumáricá c'han'da* he is called 'SU'DRACA, and in some copies 'SU'RACA; and the first year of his reign was the 3291 of the *Cali-yuga*. In the *Mahá-Bhárata*, he is called MAHA'-CARN'I, king of kings; and the name of his sovereign, whom he de-

throned, but did not put to death, was AMBU-VÍCHA. In his grant, found lately at *Benares*, he called himself ŚRÍ-CARN'N'A-DE'VA, king of *Tri-Calinga*, or *India*.

A few years ago (in 1801) this grant was found at the bottom of an old well filled with rubbish, in the old fort of *Benares*. It is engraven upon two brass plates, joined by a ring, to which is affixed the imperial seal. It is of the same size nearly, and in the same shape with that found at *Mongír*. The writing is also the same, or at least without any material deviation. The imperial seal is about three inches broad: on it, in *bas-relievo*, is PA'RVATÍ, with four arms, sitting, with her legs crossed: two elephants are represented, one on each side of her, with their trunks uplifted. Below is the bull, NANDI, in a reclining posture, and before him is a basket. Between PA'RVATÍ and the bull is written ŚRÍ-CARN'N'A-DE'VA. The grant is dated the second year of his new *era*, and also of his reign, answering to the *Christian* year 192. According to the *Puráńas*, he reigned twenty-three years, and was succeeded by his brother CRĬŚHNA, who reigned eighteen; and his son was ŚRÍ-ŚAT-CARN'I, or ŚRÍ-ŚAT-CARN'A, who reigned 56 years. This surely could not be his name, as it signifies the prosperous seven CARN'IS.

The ancestors of ŚRÍ-CARN'N'A-DE'VA, mentioned in the grant, were, first, his father GA'NGE'YA-DE'VA, with the title of VIJAYA-CANTACA: he died in a loathsome dungeon. He was the son of COCALLA-DE'VA, whose father was LACSHMANA-RAJA'-DE'VA. MAHA-CARNI, according to tradition, resided at a place called *Jángirah*, near *Sultangunj*, and about half-way between *Mongír* and *Bhágulepoor*. There some remains were shewn to me of his palace,

on the site of which an indigo factory now stands. He is called there 'SRÍ-CARN'E'SWARA, or simply CARN'E'SWARA, perfectly answering to SRÍ'-CARNA-DE'VA. The opposite rocks in the *Ganges* were known by the name of *Carnagiri*, or the hill of CARNA'. There lived the old king of *Magad'ha*, blind and deaf; and in that state of infirmity, this was certainly a very comfortable place for him to live in. It does not appear that 'SRÍ-CARN'A-DE'VA used him ill: certainly, the good old man could no longer act, or appear as a sovereign. Be this as it may, from that circumstance the old king was nicknamed AMBU-VÍCHA, or he who resides in the middle of waters.

There was also another king of *Magad'ha*, called CARN'A with the surname of DAHA'RIYA; because he generally resided at a place called *Dahára*, between *Mongìr* and *Surujgurh*; and inserted in *Major* RENNELL's atlas. This CARN'A is mentioned in an Epic Poem, entitled the wars of PRÍT'HU-RA'JA, in the spoken dialects; and part of which is in my possession. PRÍT'HU-RA'JA waged war against SULTAN GORI, in the year 1192 of the Christian *era*. The king of *Magad'ha* is called there, CARN'A DAHA'RA, and he accompanied the Emperor JAYA-CHANDRA, in his expedition against *Ceylon*, which he undertook, under pretence of a pilgrimage to worship the famous statue of CA'RTICE'YA-SWA'MI. At the head of a numerous army, he marched from *Yóginí-pura*, or *Dillí*, for thus the last is spelled throughout the poem. The general rendezvous of the vassal kings was to be at *Govál-chan'da*, said to be *Gowel-ghur*, near *Ellichpoor*. He then sent a message to VÍ'RA-BHADRA, king of *Singala*, (or *Ceylon*,) to prepare every thing for his reception; being a vassal of the empire. VÍRA-BHADRA submitted with good grace: and JAYA-CHANDRA went to *Ceylon*, worshipped CA'RTI-

CE'YA-SWA'MI, and visited the famous fort of *Sancara-grĭha*, near the sea shore, and saw there the statues of RA'MA and RA'VANA. I am also informed, that this CARN'A had a daughter, who lived in one of the royal seats near *Colgong*; and was seduced by the poet CHAUDA, whose works are still extant. I have mentioned before, that the *And'hra* princes, who ruled on the banks of the *Ganges*, are divided into three classes, the dynasty of the genuine AND'HRAS, consisting of nine kings: then the *And'hra-játiyas*, or of the family of the AND'HRAS: and lastly the *And'hra-bhrĭtyas*, or servants of the *And'hra* princes, who seized upon the government. It is not an easy matter to ascertain, whether the AND'HRA dynasty is to be placed before, or after the *And'hra-játiyas*. I have placed it before, first to fill up a chasm in the list of the emperors of *India*: in the second place, it is universally agreed, that the AND'HRA-BHRĬTYAS usurped the throne, immediately after the death of PULOMA, the last of the *And'hra-játiyas*: and this last circumstance is corroborated by the testimony of *Chinese* historians, according to MR. DEGUIGNES. Besides, in the *Brahmán'da*, the AND'HRAS and AND'HRA-JA'TI'YAS are considered but as one dynasty, consisting of thirty-six kings, from which, subtracing the nine AND'HRAS, remain twenty-seven kings, which is the exact number of kings in the dynasty of the AND'HRA-JA'TI'YAS, resulting from four lists compared together.

Nothing is related of the kings of this dynasty, except of the last, called PULIMA'N, PULOMA, LOMA'DI, and PULOMA'RCHHI, or PULOM'A the pious RĬSHI. He was a great conqueror, and put an end to his life in the holy stream of the *Ganges*.

In an inscription found at *Budd'ha-gáyá*, and inserted in the first Volume of the Asiatic Researches,

mention is made of three kings of *Magad'ha*, emperors of *India*. The first called YAJNYA-VARMA, was a most religious prince, and, taken up with the performance of religious duties, he disturbed not the powerful ocean. His son SARDULA-VARMA', though religiously inclined, was a great warrior: and he conquered the world or *India:* and he terminated his brillant career, by the voluntary deed of death, near the uprising ocean; probably at old *Ságar* behind *Fultá* near *Moorgatcha*, in MAJOR RENNELL's atlas. His son was also a pious prince, called ANANTA-VARMA'. YAJNYA-VARMA' appears to be the same with YAJNYA'SRI in the accompanying lists, and the great grand-father of PULOMA'. His name YAJNYAS'RI, as mentioned by the *Pauránics*, implies that he was fortunate, through the constant performance of the YAJNYA. YAJNYA-VARMA signifies the warrior, who delighted in the performance of the YAJNYA: and had he been of the sacerdotal class, they would have called him YAJNYA-'SARMA'. His son conquered the refractory princes through *India*, or the world; he was then entitled to the epithet of *Vijaya*, or the great conqueror: and such is the name of the son of YAJNYASRI', in the *Puránas*, where ANANTA-VARMA' is called CHANDRA'SR'I, because, being a religious prince, he was probably addicted to the worship of the moon. The *Chinese* historians mention an emperor of *India*, called YEUGNAI, which name is the same with YAJNYA, generally pronounced YAGNYA. As he lived in the year 408, the times do not coincide: but this was probably the title of some other pious prince. PULIMAN, PULOMA', or LOMA' is called POULOMUEN, HOULOMIEN, and HOULOMIENTO, by the *Chinese*. According to Mr. DEGUIGNES, he conquered all *India*, in the year 621, and died in 648. From him *India* was called *Poulomuen-Koué*, or the country of PULIMA'N by the *Chinese:* and the *And'hra* princes were so famous, that the inhabitants of the *Gangetic*

provinces were called, in the west, the *And'hra Hindus*, or *André Indi*, according to the *Peutingerian* tables, in which they are placed along the banks of the *Ganges*. After the death of PULIMA'N, the whole country was thrown into confusion, according to DEGUIGNES. OLONACHUN, one of the chief officers, (perhaps CALYANA'-CHANDRA,) seized upon the *Gangetic* provinces, and hearing that the embassadors, from TAITSONG, Emperor of *China*, to king PULIMAN, were coming with HIUENTSE, the chief of the *embassy*, he sent troops to seize them: and HIUENTSE effected his escape, with much difficulty, to *Tibet;* where YETSONGLONGTSAN, king of that country, gave him an army, with which HIUENTSE re-entered the *Gangetic* provinces, defeated the usurper, and took him prisoner.

From the death of PULIMA'N we may date the fall of the empire, though not of the kingdom, of *Magád'ha*, or south *Bahar*, in the year 648. There were *Mahárájás*, or Emperors, at *Canoge*, in *Gurjárát*, and other parts of *India*. *Anu-Gangam*, or the *Gangetic* provinces, was parcelled out, among several petty kings, such as the kings of *Magad'ha*, (or south *Bahar;*) *Mait'hila* (now *Tirhoot;*) *Sáceta* (*Oude*,) and *Benares*: the kings of *Carna-des'a* formerly *Anga* (CARNA-DAHA'RYA, in the latter end of the twelfth century, was one of them). There were also kings of *Tamralipta* (or *Tamlook* in *Bengal*,) and one of them sent an embassy to *China*, in the year 1001: he is styled king of *Tanmouielieou*, by the *Chinese*.

The kings of *Gaur* became very powerful afterwards, and even conquered all the *Gangetic* provinces, at least as far as *Benares*. They assumed the title of *Mahá-Rájás*, even as late as the 15th century. It was then, that the town of *Gaur* (or *Gau'da*) became the first city of that part of *India:* and this certainly accelerated the fall of *Páli-putra;* if it

existed then: and two rival cities, so near, or rather close to each other, could not exist together; and the vicinity of *Gaúda* probably induced the kings of *Magad'ha* to reside at *Patna;* and this, at so early a period, that even the name of the ancient capital is almost effaced from every record, and even from the remembrance of the *Hindus.*

The emperor Srí-Dé'va-Pá'la-Dé'va boasts of his having humbled the *Hun'as*, a foreign tribe, who had invaded *India*, and are occasionally mentioned in the lists of countries and tribes in *India.* They succeeded the *Parthians*, and seem of course to be the same with the *Murundas*, whose thirteen kings ruled in the northern parts of *India*, immediately after the *Tusháras* or *Parthians.* These are the *Morundæ* of Ptolemy, who were masters of the whole country to the north of the *Ganges*, from *Delhi* to *Gaur* in *Bengal.* They are declared in the *Purán'as* to be *Mléch'has*, impure tribes, and, of course, they were foreigners. The same are called *Maryanthes* by Oppian in his *Cynogetics**, who says that the *Ganges* runs through their country. Cosmas calls them white *Huns;* and relates, that when he wrote, their king Gollas besieged a certain city, and that his elephants and horses drank up the water round it, and thus forced it to surrender. This has happened very often in the parched countries of *Bicanere* and *Jesselmere;* and it does not even require a numerous army, to drink up the scanty waters of a few wells round a city: but then the besiegers, far from taking the town, are obliged to raise the siege in the greatest distress.

The seven Carn'as, in despite of the *Bráhmanical* tribes, are still famous all over *India;* and their memory held in the greatest veneration, and their fame

* Oppian Cynoget. lib. 4. v. 163.

reached even as far as the *Peninsula* of *Malacca*, where they have still poems mentioning CARN'A, the *Mahá-Rájá*, or emperor of *India*, according to MR. MARSDEN*. These poems, if procurable, might possibly throw some light on the history of those kings. Among the AND'HRA princes of this dynasty, there is one called GAUTAMI-PUTRA, or the son of GAUTAMA, being supposed to be an incarnation of him. He appears to be only a BODHI-SATWA, a disciple, or spiritual son; an appellation of the same import, but more generally used in the western parts of *India*, and by the followers of BUDD'HA. It is foretold in the *Cumáricá-c'han'da*, that after the year 3600 of the *Cali-yuga*, answering to the year 500 of our *era*, a BUDD'HA would be king of *Magad'ha*, of the house of *Hema*,, and a *Chandra-vansí;* and that after reigning 64 years, he would ascend into heaven. This *Bod'hi-satwa*, or subaltern incarnation of BUDD'HA, or, in other words, BUDD'HA himself, the D'HARMA-RA'JA, went to *China*, in the year 515 of our *era*, where he is called D'HARMA: at *Siam*, and in the *Peninsula*, he is called POUTI-SAT, and POTISATU.

We may consider PULIMA'N as the last king of *Magad'ha* at the same time emperor of *India*. After him appeared a powerful king called VISVASPHATICA, VISVASPHURJI, and VISVA-SPHAN'I. His real name was PURANJAYA. He expelled the *Cshettris* or the barons, as being too troublesome; and exalted the lowest classes, such as the *Caivarttas*, boatmen and fishermen, the *Pátics*, the *Pulindas*, &c. He was, however, a great and powerful prince, and his dominions extended all over *Anu-Gangam*, or the Gangetic provinces.

Then came a dynasty of nine kings, called the nine *Nágás*, or *Nácás*. These were an obscure tribe,

* Asiat. Researches, Vol. IV. 227.

called for that reason *Gupta-vánsas;* there were nine families of them, who ruled independent of each other, over various districts in *Anu-Gangam;* such as *Padmávatí* (*Patna*); *Cantipurí* (now *Cotwall*, nine coss to the north of *Gwalior*); *Magad'ha* (or *Bahar*); *Prayagá* (or *Allahabad*); *Sácéta* (or *Oude*); and *Benares.* There is still a powerful tribe of the *Nácás* on the banks of the *Jumná* and the *Betwá-nadí.* The *Causalas* or *Pund'hracas* ruled in *Tamralipta*, near the sea-shore, according to the *Vishnu-puraná.* In other *Puráńas*, we read the *Causalas*, or *And'hras*, which is inadmissible. The kings of *Mait'hila* (or *Tirhut*) are often mentioned; but the kings of *Gaur* (or *Bengal*) are never noticed, unless they be the *Bángavas*, once mentioned in the *Brahmán'da.* The kings of *Bengal* are not mentioned in the book of the wars of PRĬT'HWIRÁJA in the twelfth century; whilst those of *Oude*, *Tirhut*, *Bahar*, *Napal* are noticed, as well as BHOJ'A king of *Ud'ya-desá*, now *Orissa.*

A COMPARATIVE TABLE

OF THE

KINGS OF THE ANDHRA DYNASTY,

FROM THE

Bhágavat *Vishn* *Váyu* and *Brahmánda*

Balihita	'Sipraca	Sin'dhuca.....23	Ch'hismaca .....
Crishn'a	Crishná	Crishn'a 18	Crishn'a .....
'Sri-'Sata Carn'a	'Srí-'Sàt-Carn'i....	'Srí-'Sàt-Carn'i	'Srí-'Sát-Carn'i ....
Paurn'amása ..	Purn'ótsanga	Purn'ótsanga 18	Purn'ótsanga ....
	'Sàta Carn'i	Sáta-Carn'i 56	'Sáta Carn'i .....
Lambódara ..	Lambódara	Lambódara 18	Lambódara .....
Vivilaca	Vivilaca	'Apílaca 12	'Apílaca .....
Mégha-Swáti ..	Mégha-Swáti		Saudása .....
A'tamána	Putúmán.....	Putúmábi 24	A'bi .....
	Arishta-Carna	Némi-Crishna 25	
Háléya	Hála	Hála 1	Scanda-Swàti ....
Talaca	Pattalaca.....	Pulaca 5	Bhávaca .....
Purìshbhóru ..	Pravillaséna	Purícashen'a 21	Pravillaséna.....
Sunandana....	Sundara Sát-Carn'a	Sáta-Carn'i 1	Sundara Sát Carn'i
Chacóra.....	Chacóra Sát-Carn'i	Chacóra Sát-Carn'i	Charcóra Sát Carn
Vatáca		6 *months*	Mahéndra Sát Car
			Cuntala Sát Carni
Siva Swáti	'Siva Swáti	'Siva Swámi.....28	Swátishéna.....
Gómati-putra..	Gómati-putra	GAUTAMI-PUTRA21	Yantramáti .....
Purìmán	Pulimán		
	Sáta Carn'i		Sát-Carni .....
Madàsirá	'Sivàsrí		Abi .....
'Siva-scandá ..	'Siva-scanda		SivascandaSátaCar
Yajnàsri.....	Yajnasrí.....	Yajnásrí 29	
		Sáta-Carn'i 60	
Vijaya	Vijaya		Yajnàsri-Sáta Carn
Chandravijaya	Chandràfri	Dan'dasrí 3	Dandasrí Sáta Carn
Lómadhi...	Pulómárch'hi	Pulómá 7	Pulómá.....

ESSAY IV.

VICRAMA'DITYA AND 'SALIVA'HA'NA:

THEIR RESPECTIVE ERAS,

With an Account of the

BALA-RAYAS OR BALHAR EMPERORS.

THE two periods of VICRAMA'DITYA and 'SA'LI-VA'HANA are intimately connected; and the accounts we have of these two extraordinary personages are much confused, teeming with contradictions and absurdities, to a surprising degree. Their history is to be found in the *Vicrama-charitra*, the *Sinhásana-Dwátrins'ati*, and the *Vétála-pancha-vins'ati*, which have been translated from the Sanscrit into all the dialects of *India;* and the two last tracts are sections of the *Vřihat-cat'há.* The *Vicrama-charitra* is very scarce in the *Gangetic* provinces: but this deficiency is abundantly supplied, by ample extracts from that book, communicated to the Society, by MAJOR MACKENZIE of the *Madras* establishment. In general, the *Hindus* know but of one VICRAMA'DITYA; but the learned acknowledge four; and when, at my request, they produced written authorities, I was greatly surprised to find no less than eight or nine. Those who reckon four heroes of that name, agree only about two. The first VICRAMA was he, after whom the period is denominated: the second is RA'JA' BHO'JA. Some suppose that 'SA'LIVA'HANA was one of them, and that the fourth was the son of BHO'JA; whilst others insist that this last was either JAYA-CHANDRA, or PRĬTHWI'-RA'JA, who fell in the great war against the *Mahábhátadicas*, or *Musulmans*, in the year 1192. Every VICRAMA'DITYA

is made to wage war against an antagonist called SA'LIVA'HANA, SA'LABA'N, and often denominated NRĬSINHA, NA'GE'NDRA, &c. except one, whose opponent's name was MAHA-BHAT, and that of his followers *Mahábhátadicas*, that is to say MUHAMMED and the *Muhammedans*.

VICRAMA'DITYA made a desperate *tapasya*, in order to obtain power and a long life from CA'LI'-DE'VI', and as she seemingly continued deaf to his intreaties, he was going to cut off his own head, when she appeared, and granted him undisturbed sway over all the world for 1000 years, after which a divine child, born of a virgin and the son of the great TACSHACA, carpenter or artist, would deprive him both of his kingdom and of his life. Such are the words of the *Vicrama-charitra*: and in the *Cumárica-c'handa* it is said, that this would happen in the year of the *Cali-yuga* 3101, answering to the first of the *Christian era*. Thus, VICRAMA'DITYA reigned for 1000 years nearly unmolested, in the enjoyment of every rational pleasure, and never troubling himself about his latter end; till, recollecting the prophecies about this wonderful child, and that the time for their being fulfilled was near at hand, he grew very uneasy, and sent people all over the world, to find him out, that he might destroy him: and having discovered the place of his abode, he advanced at the head of an immense army, but was defeated, and lost his life, by the hand of this divine child, who was then five years of age.

The history of these nine worthies, but more particularly when considered as a single individual, is a most crude and undigested mass of heterogeneous legends, taken from the apocryphal gospel of the infancy of CHRIST, the tales of the Rabbis and Talmudists concerning SOLOMON, with some particulars about MUHAMMED; and the whole is jumbled toge-

ther with some of the principal features of the history of the Persian Kings of the *Sássánian* dynasty. For VICRAMA is supposed to have waged war with the *Romans*, all the time that he lived: that is to say for 145 years: and to have taken one of their emperors prisoner, whom he carried in triumph through the streets of *Ujjayiní*. One of these VICRAMAS was really a *Sassanian* prince: and the famous SHABOUR or SAPOR, of that dynasty, took the Emperor VALERIAN prisoner.

Thus VICRAMA is made contemporary with SOLOMON; and, like him, he is said to have found the great *mantra*, spell or talisman; through which he ruled over the elements, and spirits of all denominations, who obeyed him like slaves: otherwise they were sure of being severely punished. Like SOLOMON, he had a most wonderful throne, supported and adorned with lions, who were endued with reason and speech: and this wonderful fabric is called, in Sanscrit, *Sinhásana*, or the seat supported by lions. We read in the *vétala-pancha-vinsati*, that it was through the assistance of the great *Vétala*, or Devil, that two VICRAMA'DITYAS obtained the empire of the world, a long life, with unlimited sway. They performed the *pújá* in his honor, offered sacrifices, and in short dedicated, or gave themselves up to him. This is highly reprobated by divines in *India*, yet they seem to allow, that when all other means fail, it may be done, provided it be not for wicked and abominable purposes. We read in the *Thamuráthnameh** that the div. ARGENK had likewise applied to the devil, to become the SOLOMON or VICRAMA of his age. ZOHAC gave himself up also to the devil, in order to become the sovereign lord of the world, and with his assistance he killed his predecessor.

* D'HERBELOT's Bibl. Orient. v. SULEIMAN.

But let us return to the extract from the *Vicrama-charitra*, by MAJOR MACKENZIE. Then came BALA-RĬSHI, VICRAMA'RCA, BALI and BHARTRĬHARI, four brothers, from four mothers, of the four different classes, and sons of a holy *Bráhmen* of *Benares*. The last, or BHARTRĬHARI, was of the fourth class, and succeeded to the throne. He was learned, pious, and valiant; and it is believed that he is still alive, as a *Muni*, in the wilds above *Hari-dwár*. He was succeeded by VICRAMA'RCA, who made a sacrifice in honor of the goddess CA'LI', and offered his own head. The goddess appeared to him, saying, what is your boon? That I may rule the world for a long time. The goddess, pleased with his faith and devotion, told him, that at *Ujjayiní*, he should rule the terrestrial world for 1000 years, without hindrance or molestation, and at last that he should be slain by a child, born of a virgin one year and a half old. His brother, being informed of this circumstance, said he would lengthen his life to 2000 years, for, as he was to rule at *Ujjayiní* for 1000 years, he had only to remain in that city six months in the year, and the other six out of it. He then ascended to heaven, in his human body, where he was well received by INDRA, saw RAMBHA' and URVAS'I' dancing, and there was presented with the famous *Sinhásana*, or seat adorned with lions.

He chastised the VE'TA'LA-DE'VA, or the king of the devils, made him his slave, who then related to him twenty-five curious stories, to be found in the *Vétála-pancha-vin'sati*. Toward the latter end of his reign, he sent secret emissaries, through all the world, to inquire, whether a child were born of a virgin one year and a half old. The messengers returned to *Ujjayiní*, with the news, that a male child was born of a virgin, the daughter of a potmaker, begot by the king of snakes (called TACSHACA, or the Carpenter, in the original,) while she was in her cradle. They

informed him also, that this child, named SA'LA-VA'HANA, had attained the age of five years; and that his grandfather had made numberless clay figures of soldiers to amuse him.

VICRAMA'RCA marched at the head of an army; but the protecting snake came to the assistance of the child, and inspired the figures of clay with life, who started up as able warriors, attacked VICRAMA'RCA and his army, and defeated him. SA'LA-VA'HANA cut off his head, and flung it into *Ujjayiní*, that his death might be known to all the world. The queen was delivered in that very month of a male child; after which she burned herself with the head of her lord, who was re-united to the Supreme Being. Whilst the grandees of the state were assembled to place the child upon the imperial throne, a voice from heaven declared, that as the child was born after the death of his father, he could not succeed to the empire of *India*, but only to the throne of *Málava*; and the same voice ordered the *Sinhásana*, or the imperial throne, to be buried in a secret place. SA'LA-VA'HANA, who was a learned and pious man, became a *Muni*, and withdrew to desert places, to give himself up to devout contemplation. MAJOR MACKENZIE informs us, that in the chronological list, VICRAMA'RCA is declared to have reigned only 944 years; and in another, that it was only his dynasty or empire which is said to have lasted so long.

The learned of the western parts of *India*, whom I had an opportunity to consult, assured me, that the first *Millenium* ended about the beginning of the Christian *era*, and the second *Millenium*, when the Musulmans penetrated into the more inland parts of *India*; probably under MAHMOOD, about the year 1000 of our *era*.

The year 3044 of the *Cali-yuga* is looked upon by many as the year of VICRAMA'RCA's death: hence in the *Deccan*, they have reduced his supposed reign to 944; but by others it is looked upon as the first of his reign, which then must have ended in the 1000th year, answering to the first of the Christian *era*. Hence VICRAMA is said, in the *Tádkerát-Assalatin*, as cited by BERNOULLI, to have lived 1100 years, before he re-appeared and reigned at *Dílí*.

This VICRAMA'RCA, called also VICRAMA-S'ENA and VICRAMA-SINH, is supposed to be the most ancient; yet his brother BHARTRĬHARI (also named SUCA'DITYA or SUCARA'JA), besides a treatise consisting of 300 moral sentences, and simply called BHARTRĬHARI, after him, wrote likewise a collection entitled *Sucasaptati*, or the 70 tales of the Parrot. Mention is there made of a more ancient king, VICRAMA-S'ENA, to whom, and his daughter-in-law PRABHA'TI', the Parrot relates these amusing stories. Every VICRAMA has either a parrot, a demon, or statue to entertain him. Another peculiarity of every one of them is, that upon the least disappointment, or fit of ill-humour, he is ready to cut off his own head, and throw it at the feet of the goddess CA'LÍ, who interposes and grants his boon. Hence it is said, that the first time he cut off his own head, CA'LÍ granted him only one hundred years; when cutting it off again, he obtained to live for 100 years more: and every time, his familiar, the *Vétála*, replaced it upon his shoulders. This he did ten different times, when the *Vétála*, or the devil, informed him that this could be done ten times only, and no more, as in the case of RA'VAN'A, *as every body knows*.

We read, that there was a king of *Pátalíputrapura*, called VICRAMA-TUNGA, who was like a lion, *sinha*: hence he is called VICRAMA-SINHA through the whole legend. He happened to be in the holy city

of *Pratíshtán'a*, when fifty of his relations (the heads of whom were MAHA'BHA'TA, and his four confidential associates, MAHA'-VÍRA-BA'HU, or MAHA'-BA'HU, SU-BA'HU, SU-BHA'TA, and PRETA'PA'DITYA, all *mahabalas*, strong and valiant men), surrounded him with a numerous army of *Mahábhatadicas*, or *Muhammedans*. He effected his escape with much difficulty, and fled to *Ujjayiní*, where he concealed himself in the house of a rich merchant, who with his wealth enabled him to raise another army, when he attacked the *Mahábhatádicas*, and gained a complete victory. In the mean time, his wife 'SA'SILE'C'HA', having been informed that her lord had been killed in battle, burned herself. The merchant's son having been confined by the king of *Ujjayiní*, VICRAMA-SINHA, at the head of his army, set him at liberty, and then returned to his own capital *Patalí-putra-pura*, or *Patna*. It is said, in the third story of the *Vétála-pancha-vins'ati*, that MAHA'-BHATA', or MAHA-RA'HU, was from *Anangapura*, in *Ananga-dé'sa*, or country of ANANGA; the same with CA'MADEVA, which *Pandits* suppose to be toward the west. MUHAMMED is said to be the grandson of a king of *India*: hence he is called a relation of VICRAMA'DITYA.

In the seventh section of the *Vrihat-cat'há*, we read, that there was a king of *Pátalí-putra-pura*, called VICRAMA'DITYA, who, hearing of the growing power of NRĬSINHA, king of the consecrated city, or *Pratishtán'a*, called to his assistance the *Gaja-pati*, (lord of the elephants, or king of *Tibet*), and the *A'sva-pati* (lord of horses or horsemen, or the king of *Persia*). The confederates took the field; but were defeated by NRĬSINHA-NRĬPA or SA'LIVA'HANA, with an incredible slaughter. VICRAMADITYA fled with the utmost precipitation to *Pátalí-putra;* but meditating vengeance, he disguised himself like a *carpati*, or man who carries all over *India* the holy water of the *Ganges*, and went to *Pratish'tán'a*. There he was

kindly received by a rich merchant, in whose house he remained a long time. King NRĬSINHA, or SA'LIVA'HANA, happening accidentally to call at the merchant's house, they recognised each other; and NRĬSINHA, admiring his comely appearance, and also his courage and confidence, acknowledged himself overcome by him; when VICRAMA'DITYA advanced, and they embraced each other most cordially. NRĬSINHA carried him to his palace, where, having entertained him in a suitable manner, they parted in peace, and VICRAMA returned to *Pátalí-putra-pura*, having seemingly settled every thing concerning their respective *eras*, at least it is so supposed.

In the tenth section of the *Vrĭhat-cat'ha*, we read that VICRAMA-CES'ARI, was prime minister to MRĬGA'NCADATTA, king of *Pátalí-putra*. The king used to wander by himself through the woods, where he often lost his way, seemingly through some infirmity; and his prime minister used to go in search of him. It happened once that he could not find him, and, passing near a holy place called *Brama-st'hala*, he saw a *Bráhmen*, sitting under a tree, near a well. VICRAMA-CE'S'ARI approached the holy man, who forbade him to come near, as he had just been bitten by a venemous snake: but VICRAMA, who was well acquainted with the medical art, soon cured him. The *Bráhmen*, willing to shew his gratitude, asked him why he did not aspire to power and dominion. VICRAMA-CE'S'ARI seemed willing enough, and asked him how this could be effected. The priest replied, perform the *púját* in honour of the great *Vétála*, or the devil, and you will obtain from him whatever you wish; and you will become like VI-SAMA-SAILA, with the title of TRI-VICRAMA, who had the *sidd'his*, or power or working miracles.

At *Pratish'táná*, says the *Bráhmen*, on the banks

of the *Gódáverí*, reigned TRI-VICRAMA-S'ENA, the the son of VICRAMA-S'ENA. He was thus called, because he possessed *acrama*, *pracrama*, and *vicrama*, three synonymous words, implying energy in a great degree. A *Bráhmen* used to come very often, and presented him every time with a flower, in which was concealed a jewel of great value. The king respectfully received the flower, and afterwards threw it away into a corner, where they all remained neglected and undisturbed. At last the king accidentally discovered a jewel, and searching into every flower, found in every one a gem also. When the priest came again, he asked the reason of this strange circumstance, and what he meant by it. The *Bráhmen* informed him, that, if he would come alone to a certain place, which he pointed out, he would then reveal the whole mystery. The King did not fail to go, on the appointed day: when the *Bráhmen* informed him, that before he could unfold this secret, it was necessary that he should go into an adjacent grove, where was a corpse hanging upon a tree: cut the rope, says he, and bring the dead body to me. The king, though very unwilling, was obliged to comply, and having cut the rope, he placed the dead body upon his shoulders; and, on the road, a spirit that was in it, spoke, and related five and twenty stories to amuse and deceive the king; when, at the end of each story, the corpse flew back to its tree, and every time TRI-VICRAMA went and brought him back, and being at last irritated, he took care he should no more escape. Then the spirit informed him that the *Bráhmen* wanted to destroy him, and usurp his throne. For this purpose, he was going to perform some magical rites, in which a dead corpse was absolutely necessary; and that this was the reason why he had insisted on the king bringing him a dead body. TRI-VICRAMA-S'ENA being satisfied with the truth of this information, put the *Bráhmen* to death; and MAHA'DE'VA appeared to him, saying, thou wert

before VICRAMA'DITYA, a portion of my own essence. I have now generated thee in the character of TRI-VICRAMA to destroy the wicked; and ultimately thou wilt be VICRAMA'DITYA again; and, when thou diest in that last character, thou wilt be re-united to me. This alludes, according to the learned, to the two *Millenniums* of VICRAMA'DITYA. This legend is a little obscure, and the compiler seems to have jumbled together the legends of VICRAMA'DITYA and SA'LIVA'HANA; though of the latter no mention, by name at least, be made.

As VI-SAMA-S'ILA was at first king of *Pratisht'ánd*, he was, of course, the same with 'SA'LIVA'HAN'A; and the first part of the legend has an obvious reference to him in that character. VICRAMA-CESA'RI appears to be the S'RI'-CARN'A-DEVA-RA'JA-VICRAMA, with the title of A'DITYA, who dethroned his sovereign, taking advantage of his infirmities; and this VICRAMA-CES'ARI, in the third story of the *Vétála-panchavinsati* is declared to be king of *Pátalí-putra-bhû-mandàlam*, or country and region of *Pátalí-putra*, as every body knows: and his wife's name was CHANDRA-PRABHA'-MAGADHÍ, being a native of *Magadha*.

It is said, in some legends *, that three male children were born the same day: one, the son of a *Bráhmen*, the second, a *Cshettri*, and, the third, a *Vais'ya*: some add a fourth of the *'Súdra* tribe. It was foretold, that one of them would become king, or, at least, remain so without being molested, if a king already; but not before the two others had been put to death. The *Bráhmen*, hearing of this, easily circumvented the *Vais'ya*, who was a *Taili*, or oil-man, with whose body he wanted afterwards to perform a most abominable sacrifice to *Vétála*, or the

* In the *Bhója-prabandha*.

devil, in order to destroy VICRAMA'DITYA. MAHA'-DE'VA became incarnated in the person of TRI-VICRAMA, at *Ujjayiní*, or rather *Pratisht'ana*, on the following occasion. The gods, that is to say, the *Bráhmens* and *Hindus*, being vexed by the *Mléch'has*, or foreign and impure tribes, went in a body to *Cailása*, to MAHA'-DE'VA, to whom they said, you and VISHNU have destroyed the *Asuras*, or *Daityas*, but these are born again on earth as *Mléch'has*. They vex the *Vipras*, or *Bráhmens*, and will not allow the performance of religious rites and sacrifices, destroying all the religious instruments, and other requisites: they even carry away the daughters of holy *Munis*. In consequence of this remonstrance, TRIPURA'RI, or MAHA'-DEVA, was incarnate, in the house of SURA-MAHE'NDRA'DITYA-JAGATJAYA, at *Ujjayiní*, who was making *Tapasya*, to obtain a son. As soon as his wife had conceived, the heavenly host came down to worship her. The high-priest and prime minister, who were also childless, obtained each a son; and young VICRAMA'DITYA, called also VI-SAMAS'ILA in this place, soon surpassed his teachers in learning and wisdom.

The old king resigned the throne to him, and then withdrew to *Benares*; and VICRAMA'DITYA became king of heaven, hell, and earth: the genii and demons were obedient to him, and his fame reached the *White island* in the *sea of milk*, or *White sea*. His general, VICRAMA-S'ACTI, conquered *Dacshin'a-pat'ha*, (or the *Deckin,*) *Mad'hya-des'a*, (or the inland parts of *India,*) *Cásmir* and *Saurashtra*, (or *Soret,*) and the countries to the east of the *Ganges*. He forced VÍRA-SE'NA-SINHA'LES'WARA, or the king of *Sinhala*, or *Ceylon*, to sue for peace, and to give him his daughter, and *Cut'aca*, (or *Cuttaca*,) was obliged, at last, to submit. He extirpated several tribes of *Mlech'has*, and others surrendered at discretion. He married, at *Ujjayiní*, three wives, GUN'AVATÍ, CHANDRA'VATÍ, and MADANA-SUNDA'RÍ: wishing to marry

a fourth, he saw, in the house of VIS'VACARMA, a beautiful damsel, daughter of CALINGA-S'ENI, king of *Stambhasta*, (now *Cambát*, or *Cambay,)* in *Calinga-des'a*. He sent a trusty man to demand her of her father, who refused his consent: but VICRAMA'DITYA sent one of his attending spirits, who soon obliged him to comply.

This is, it seems, the VICRAMA'DITYA who obtained a famous boon from INDRA, in favour of his favourite country *Málava*, that it should never be visited by drought. In his time there had been no rain for twelve years, owing to SAN'I, (or SATURN,) passing into the house of 'SUCRA, (or VENUS,) in VRĬSHA, (or TAURUS,) through the *S'acata-bhéda*, (or section of the wain,) in *Róhiní*, (or the stars near *Aldebaran).* In the time of DA'SARAT'HA, SATURN, the offspring of the Sun, attempting to go through this path, was prevented by DAS'ARAT'HA, and hurled down into a country which he set on fire, and it was, from that circumstance, called *Barbara*.

In the *Sinhásana-dwátrinsáti*, the twenty-fourth statue is introduced, giving to king BHÓJA an account of VICRAMA, and of 'SA'LIVA'HAN'A. There was, in *Purandarpura*, a rich merchant, who, before he died, gave to every one of his four sons an earthen pot, sealed, with injunctions not to open it till after his decease. When opened, the first was found to contain nothing but earth; the second, coals; the third, bones; and the fourth, bran. VICRAMA was applied to for an explanation, but neither he nor any body else could explain this enigma. The four sons went afterwards to *Pratisht'an'a*, and neither the king nor any body else there could give them an answer; but there was a wonderful child who did. There were two *Bráhmens*, who had a sister, who lived with them in a state of widowhood, her husband having died whilst she was yet very

young. She conceived by a *Nága-cumára*, (or *Tacshaca ;)* and the brothers ashamed of this seeming disorderly behaviour of their sister, left the country. The unfortunate young widow, thus deserted, found an asylum in the humble cottage of a pot-maker, where she was delivered of a male child, whom she called 'SA'LIVA'HANA. The child, hearing of this strange case, went to the king's presence, where the four sons of the merchant were, with a numerous and respectable assembly. He spoke without embarrassment, and they were astonished, for his words were like *amrit* or *ambrosia.* The first pot, says he, containing earth, entitles the owner to the landed property of his father. The second contains coals, and of course all the timber and wood become the property of the second son. The third is entitled to the elephants, horses, cattle, and animals of all descriptions belonging to the estate; and the fourth is entitled to the corn and grain of all kinds, the property of his father. VICRAMA'DITYA, on hearing of this, sent for the child, who refused to come: go, says he to the messenger, and tell him that when I have completed my business, or in other words, when I shall be perfected, or my time is arrived, he will come to me of himself. VICRAMA'DITYA, irritated at this answer, wanted to kill him; and advanced, at the head of a numerous army, against the child, who, making figures of soldiers with clay, animated them. They fought on both sides with courage; but the *Nágacumára*, or son of the great serpent, stupified VICRAMA's army; who, finding his soldiers asleep, implored the assistance of the serpent VAS'UCI, who gave him some *amrit*, with which he revived his troops; and 'SA'LIVA'HANA, hearing of this, sent two men for some of it, and VICRAMA complied with his request: and here ends the legend, which was introduced only to give an instance of VICRAMA'DITYA's unbounded generosity.

The next VICRAMA'DITYA, and whose history is best known all over *India*, was the son of GARDDABHA RUPA, or he with the countenance of an ass; and an account of him is given in the *Vicrama-upac'hyána*, or first section of the *Sinhásana-dwâtrinś'ati*.

The next VICRAMA'DITYA was the famous king BHÓJA, who recovered the *Sinhásana*, and going to the *White island*, dived into the infernal regions, where he saw the apartments of CRĬSHNA, or VISHNU; and close to them those of BALI, who received him kindly, and bestowed upon him the title of VICRAMA'DITYA; and his son, called JAYA'NANDA, was stiled also VICRAMA'DITYA. According to others, JAYA'NANDA was only either the adopted son, or the son-in-law of RAJA-BHÓJA, having married his daughter BHA'NU-MATÍ.

The principal feature of the history of these VICRAMA'DITYAS, as I observed before, at whatever period they lived, is their quarrels with a certain king, called SA'LIVA'HANA, with the title of NRĬSINHA, NA'GA-CUMA'RA, NA'GE'NDRA, &c. except one, who is introduced as contemporary with MUHAMMED, and waging war against him, and his followers, the *Mahábhatádicas*. Even in the time of JAYA CHANDRA, the last emperor of *India*, we find, in Persian records, a 'SA'LBA'HAN, king of *Dílli:* and in the district of *Budhaon*, in that province, there is a small town, the capital of a Pergannah of the same name, called *Cote-'Sálbáhan*, or the fort of 'SA'LBA'HAN, and said to have been built by him.

The chief authorities, after the *Vicrama-charitra*, and the other books I have mentioned before, are the last sections, or rather supplements to the *Agni* and *Bhavishya-purán'as*, the list of the kings of *Málwá*, in

the *Ayin-Acberi*, the *Vansáváli*, or *Rájávâli*, written by RA'JA' RAGHUNA'THA, of the *Cach'hwa* tribe, at the command of the emperor AURENGZEBE; and, lastly, a list of the *Bala-Ráyas*, or *Balhara* emperors, and of the sovereigns of *Malwá*. The last section, or rather supplement or appendix to the *Agni-purán'a*, is the best chronological list that has come to my knowledge. It is seldom found annexed to that *Purán'a*; no more than the appendix to the *Bhavishya*. I was however fortunate enough to find it at the end of a copy of the *Agni-purán'a*, at least two hundred years old; and, though complete, almost worn out. There I found the beginning of the appendix on futurity, exactly in the same hand-writing with the body of that *Purán'a*, and the owner most kindly made me a present of the last leaf, which contains both the end of that *Purán'a*, and the beginning of the appendix. In a copy of that appendix, it is said to be the 63d and last section of the *Agni-purán'a*. The numbers do not correspond now, though it be acknowledged, that the division of the *Purán'as*, into sections, has not been the same, at all times, and in every part of *India*.

With regard to the appendix, or section, of the *Bhavishya-purán'a*, it is obvious that it never made part of that *Purán'a*, at least in its present state: but, as it treats of futurity *(Bhavishya)*, it was probably on that account attributed to it; for it appears that it belonged originally to some astronomical treatise, and it is very much like the preliminary section to the *Jyótirvidábharána*. It is supposed by some, that it is a short extract from the second part of that *Purán'a*, which either no longer exists, or is not to be commonly found. In the first part, there is not a word about futurity, or the times to come.

These lists are the more valuable, as they give us

an account of the emperors of the west in *India*, of whom little or no notice is taken in the *Purán'as*. The chief object of the compilers seems to be to establish the chronology of the western parts of *India*, since the expiation of CHA'NACYA, down to the death of PITHAURA', and JAYA-CHANDRA, in the year 1192. The three first lists are nearly the same, and probably they were originally so; and as the list of the emperors of the west in *India*, in the *Ayin-Acberi*, is one of them, it is obvious, that above two hundred years ago, they were considered, by the *Pandits* who assisted ABUL-FAZIL, as authentic documents.

The fourth list is from a work entitled *Vansávali*, or the genealogies; but more commonly called *Rájavali*, or reigns and successions of kings. It was written in the year 1659, by RA'JA' RAGHUNA'THA, of the *Cach'hwa* tribe, at the command of AURENGZEBE. This has been translated into all the dialects of *India*, and new modelled, at least twenty different ways, according to the whims and pre-conceived ideas of every individual, who chose to meddle with it.

It is, however, the basis and ground-work of modern history among the *Hindus*; as in the *Khuláset-ul Tuwáric*, and the *Tadkerátussalátín*. The latter treatise is a most perfect specimen of the manner of writing history in *India*; for, excepting RAGHUNA'TH's list, almost every thing else is the production of the fertile genius of the compiler, who lived above a hundred years ago. In all these lists the compilers and revisers seem to have had no other object in view, but to adjust a certain number of remarkable epochs. This being once effected, the intermediate spaces are filled up with names of kings not to be found any where else, and, most probably,

fanciful. Otherwise they leave out the names of those kings of whom nothing is recorded, and attribute the years of their reigns to some among them better known, and of greater fame. They often do not scruple to transpose some of those kings, and even whole dynasties; either in consequence of some preconceived opinion, or owing to their mistaking a famous king for another of the same name. It was not uncommon with ancient writers, to pass from a remote ancestor to a remote descendant; or from a remote predecessor to a remote successor, by leaving out the intermediate generations or successions, and sometimes ascribing the years of their reigns to a remote successor or predecessor. In this manner the lists of the ancient kings of *Persia*, both by oriental writers and others in the west, have been compiled: and some instances, of this nature, might be produced from scripture. I was acquainted lately, at *Benares*, with a chronicler of that sort; and, in the several conversations I had with him, he candidly acknowledged, that he filled up the intermediate spaces between the reigns of famous kings, with names at a venture; that he shortened or lengthened their reigns at pleasure; and that it was understood, that his predecessors had taken the same liberties. (His lucubrations were of little use to me; but he had collected various lists of kings, of which he allowed me, with much difficulty, to take copies.) Through their emendations and corrections, you see plainly a total want of historical knowledge and criticism; and sometimes some disingenuity is but too obvious.

This is, however, the case with the sections on futurity in the *Bhágavat*, *Váyu*, *Vishnu* and *Brahmán'da-purán'as*; which, with the above lists, constitute the whole stock of historical knowledge among the Hindus; and the whole might be comprised in a few quarto pages of print. These I have collected toge-

ther, with notes, derived from the assistance of foreign writers; and hereafter they may be corrected, from a few historical passages in their books, grants, and inscriptions, which last must be used soberly. With regard to these lists, their being brought down, even to our own days, can be no objection; for it is the case with many of our old chronicles. We have them in the *Ayin-Acberi*, in the state they were in at that time. I have some copies, in which their chronology is brought down to the reign of AURENGZEBE: and, lastly, some, in which the arrival of the English is foretold, under the name of *Támra-varn'a*, foreigners, the offspring of MAYA, the engineer of the giants, and the son of TWASHTA. *Támra-varn'a* literally signifies copper-coloured, but is interpreted *Arúna-varn'a*, or of the colour of the morning dawn; and, in lexicons, the *Greeks*, or *Yavanas*, are said to be *Támra-varn'a*. In RAGHUNA'T'H'S list, it is remarkable, that no obvious notice is taken, either of the elder VICRAMA'DITYA, or of 'SA'LIVA'HANA; they are however concealed under the names of ADITYA, ridiculously written ADHESCHT by TIEFFENTHALER, and under that of D'HANANJAYA, which last is meant for 'SA'LIVA'HANA. 'ADITYA is obviously meant here for VICRAMA; in some copies he is called HARA-BHA'GA, or a portion of HARA, the destroyer; because it was necessary that he should destroy 550,000,000 men from among the impure tribes, before he could obtain the rank of a *Sacés'wara*; and whatever man kills a *Sacés'wara* only, obtains that exalted rank, as did 'SA'LIVA'HANA.

DHANANJAYA, or DHANID'HARA, as he is called also, is supposed by ABUL FAZIL, to have been the grandfather of 'SA'LIVA'HANA *: but, as there are se-

* Ayin-Acberi, vol. 2d, p. 54.

veral kings and legislators called VICRAMA; in the same manner we find also several SA'LIVA'HANAS. This grandson of DHANANJAYA is made contemporary with another VICRAMA'DITYA, who is supposed to have begun his reign A. D. 191; but, according to others, either in the year 184 or 200. In RAGHUNA'TH's lists, current in the western parts of *India*, which have appeared in print, instead of SA'LIVA'HANA, we find SAMUDRA-PA'LA, perhaps a disciple of his, and thus called, because he came by sea. In this remarkable instance, these lists differ, most materially, from those in use in the *Gangetic* provinces, and eastern parts of *India*. In the latter, in the room of VICRAMA'DITYA, we read SURACA, or SUDRACA, a famous emperor of *India*, mentioned in the *Puráńas*, and of whom it is said, in the *Cumárica-c'han'da*, that he would ascend the imperial throne, after 3290 years of the *Calì-yuga* were elapsed, that is to say, in the year of our Lord 191, and that he would reign in the city of *Charchitá*, thus called from the search (*cherche* in French,) or inquiries made there into various religious opinions, and new dogmas; and thus it is understood by learned men from the west of *India*, and it appears that there were several cities thus called. This SUDRACA had also the title of VICRAMA, and of A'DITYA: but in the eastern lists no mention is made of SAMUDRA-PA'LA. TIEFFENTHALER takes notice of him, and BERNOULLI has given us the whole legend, such as it is in the MSS. copies.

When VICRAMA'DITYA was ninety years of age, then came SAMUDRA-PA'LA, or he who was fostered, or wafted over, by *Samudra*, or the ocean, because it is understood, that he came from distant countries by sea. He appeared in the character of a holy man, working miracles, and, as it seems, preaching about

regeneration. He was kindly received by VICRAMA'DITYA, who being old and decrepit, wished very much to be regenerated. SAMUDRA-PA'LA complied with his wishes; and, as there was a stout young man just dead, he directed the old king to send his own soul into that corpse, and showed him how to do it. VICRAMA'DITYA did so, and the young man revived immediately, to the great astonishment of the multitude. In the mean time, SAMUDRA-PA'LA conveyed his own soul into the body of the king; and, in that old and decrepit frame, he contrived to maintain himself, for the space of 55 years, or more correctly 54 years, two months, and twenty days; and thus governed the country, with unlimited sway, in the shape and character of VICRAMA'DITYA. These 55 years being added to the 90 years of VICRAMA's life or reign, the sum, 145, is exactly the difference between the eras of VICRAMA, and 'SA'LIVA'HANA, in the *Dek'hin;* for, in the northern parts of *India*, they reckon only 135 years. This new 'SA'LIVAHANA, or rather his disciple, or follower, if he ever existed, died in the year 335: for this second VICRAMA, or 'SUDRACA, as he is called in the *Cumárica-c'handa*, ascended the Imperial throne in the year of CHRIST 191: but in RAGHUNA'T'H's list, this event took place in the year 291. That there is an error of 100 years is obvious, on the authority of the above section of the *Scanda-puráńa*, and also from the particulars in the same list. There it is declared, that the succession of the Hindu princes ended in the year of the *Calí-yuga* 4116, answering to that of CHRIST 1016; but the particulars give 4216; and, by retrenching these 100 years, the aggregate sums, resulting from the subordinate periods, perfectly agree with the general one, as given at full length in the list. These subordinate periods become also proportionate to one another, from MAHA'BALI's accession to the throne, 355 B. C. down to the year 1016 of

our *era*. The reason why these 100 years, and a few more in another place, were introduced, is that the correctors of this list confounded the final overthrow of the Hindu empire, in the year 1192, by SAHEBUDDEEN, with the mortal wounds given to it by SEBECTEGHIN, and his son MAHMUD, in the beginning of the eleventh century. In all the copies which I have seen, of RAGHU NA'TH'S' list, an obvious notice is taken of the famous emperor BHÓJA: yet the learned insist that he is concealed there, under the epithets of DEVA-DHA'RA'-SINHA, as he is called in some lists, and 'SAILA-DHA'RA-SINHA in others: but in many copies these names are written erroneously DAMO-DHARA-S'ENA, and JALA-DHARA-SENA. In the *Bhója-prabandha* the epithet DE'VA is always prefixed to his name, thus DE'VA-BHÓJA; and in the room of these various surnames, we find in some copies DIVA'YANA-SINHA. As BHÓJA was king of *Dhárá* (now *Dhár)* he might certainly be denominated DHA'RA'-SINHA. This famous city is called also *'Sàila-dhárá*, and BHÓJA is called 'SA'ILA'DITYA, or VICRAMADITYA, who resided at *'Sàila-dhárá*, in the *Satrujaya-mahatmya;* and in the same manner, 'SA'LIVA'HANA is denominated PATTAN-SINHA or 'SE'NA, from the town of *Pratisthána* (or *Pattan)* where he is said to have resided. If so, the new modellers of these lists have introduced many obscure, or rather fictitious names, in order to fill up the space, between that emperor and the downfal of the empire in 1192, by SAHEBUDDEEN, which they have confounded with the catastrophe under MAHMUD-BEN-SEBECTEGHIN. In various lists, which I have seen, SEBECTEGHIN'S name is written SEBECTEKIN, SANECTEKIN, NECTEKIN, &c.

As BHÓJA is not noticed by any foreign writer, it is impossible to ascertain the time in which he lived, from the vague and contradictory *data* to be found in

Hindu romance, within 100 years at least of the real time. Such is however the state of the Hindu chronology, even in modern times: and from such wretched materials what can be expected? Western historians, and those of *China*, have occasionally recorded eclipses, which are of great service in chronology; but they are absolutely disregarded by Hindu writers; at least, I have never been able to procure a single observation upon record, and connected with any historical fact, or the reign of any well-known king or emperor.

In these different lists, the principal *eras* are, the accession of MAHA'-BALI to the Imperial throne, 355 years B. C. his death in 327, the massacre of the Imperial family in 315, and finally, the expiation of CHAN'ACYA, 312 years B. C. and of these remarkable events I took particular notice in my essay on the *Gangetic* provinces.

The next remarkable *era* is that of 'SA'LIVA'HANA and the eldest VICRAMA'DITYA: this the compilers and revisers have wrapt up in such darkness, and I believe designedly, that it is almost impossible to recognise these two famous kings. In some, 'SA'LIVA'HANA is called PATTAN-S'INHA; in others DHANANJAYA, DHANADHARA, &c. 'SACA, 'SACTI-S'INHA; and in the *Vrĭhat-cat'há*, SAMA-S'ÍLA, and VI-SAMA-S'ÍLA, and lastly HA'LA and SA'LA, HA'LI and SA'LI, NRĬSINHA and NARA VAHANA. VICRAMADÍTYA is sometimes called 'ADITYA simply; in other places VICRAMA, VICRAMAMITRA, VICRAMA-TUNGA, VICRAMA-S'INHA, VICRAMA-SE'NA, VICRAMA-CESA'RI, VICRAMA'RCA, &c. whilst he is sometimes left out entirely; which is immaterial, as they say, when SA'LIVA'HANA, his antagonist, is mentioned.

The third epoch is that of king SURACA, called

also ADITYA, and RAJA-VICRAMA, who began his reign in the year 191.

The fourth *era* is that of VICRAM'ADITYA the son of GANDHARUPA, whose reign began in the year 441.

The fifth is the appearance of MAHA'-BHAT' or MUHAMMED; and the sixth is the accession of BHÓJA, called also VICRAM'ADITYA, to the imperial throne.

The seventh *era* is the defeat and death of PITHAURA in 1192, and that of JAYA-CHANDRA, in the year 1194.

Let us now examine and compare together the lists in the appendix to the *Agni*, and to the *Bhavishya-purán'as*, and also in the *Ayin-Acberi*. In the *Bhavishya*, the years are omitted, but it agrees otherwise with the other lists, as much as can reasonably be expected.

There are three kings in the appendix to the *Agni purán'a*, seemingly in a regular order of succession; but who are to be rejected from the list; as it appears, from the context, that they were only in a collateral line, and seem to have been rebellious vassals, who, taking advantage of the weakness of their liege, set up for themselves, in their own country. The first was a rebel of the name of 'ATACA, as seemingly implied by his name, who made himself independant, and resided in the town of *D'hára*. He lived 190 years; that is to say, his collateral dynasty lasted so many years, and this dynasty was very properly omitted in the *Ayin-Acberi*. Then comes SUC'H-S'ENA, or SUMUC'H-S'ENA, with another king called C'HA'DGA or C'HARGA; and these resided at *Chitra-cút'a* in *Bundelc'hand*, as asserted in that sec-

tion or appendix. SUMUC'HA-S'ENA is called KENECK-SEIN in the *Ayin-Acberi;* and in that treatise, *Chitra-cúta*, their metropolis, is metamorphosed into a king, to whom a reign of one year only is allotted. The names of the three next princes, CHANDRAPALA, MAHE'NDRA-PA'LA and KURRUM-CHUND, in the *Ayin-Acberi*, should be written in this manner, RA'MA-CHANDRA, who did not reign: his son was CHAITRA-PA'LA, who was elected emperor of *India* after the death of JAYA-NANDA. His son and successor was MA'HA-CHANDRA-PA'LA; but I conceive that the true name of the latter was MAHE'NDRA-PA'LA.

From CHA'NACYA's' expiation to the first year of VICRAMA'DITYA, the son of GANDHA-RUPA, the three lists do not materially differ from each other with regard to the number of kings, and the order of succession. The greatest difficulty is, from the first year of VICRAMA'DITYA, the son of GANDHA-RUPA, or HARSHA-ME'GHA, which last is a ridiculous epithet for an ass, to the first of BHÓJA. The greatest part of the names of the kings, in this list, are probably fictitious, except some of the most illustrious. The first we recognise is MAH'ABALI, or NANDA, who ascended the throne of *India* 355 years before CHRIST. From his accession there elapsed 299 years, according to RAGHUNA'TH's list, to the death of VICRAMA'DITYA, which happened 56 years B. C. Then appears DHANANJAYA, who put to death 'ADITYA: these are 'SA'LIVA'HANA and VICRAMA'DITYA: the times coincide, and the name of one of them. DHANANJAYA is also the name of A'RJUNA in the *Mahá-bhárat*, of whom it is said, that he did not exult over the ignorant and ill-favoured, but spent his riches among the needy; in short, he was the wonder of all good men. This is the character given of 'SA'LIVA'HANA in the *Cumáricá-c'han'da*, and

the *Agni-purán'a*. This second DHANANJAYA, called also DHANANDHARA, is reckoned as an *Utpata*, or prodigy; and some account of him is given in the *Ayin-Acberi**, and also in traditionary legends. He sprang suddenly from the middle of a temple at *Prat-shtána* in the *Dekhin*, in a human form, and with a divine countenance, holding a bright sword. He attacked A'DITYA, or VICRAM'ADITYA, whom he put to death; then, leaving the *Dekhin*, he made *Ujjayiní* the seat of his empire. In the grant found at *Monghir*, allusion is made to VICRAMA'DITYA, under the name of 'SA'CADWISHI, the foe of 'SACA or 'SA'LIVA'HANA; and it is not improbable that the prime minister, in the inscription on a pillar at *Buddaul*, is compared to 'SA'LIVA'HANA, under the name of DHANAN-JAYA†.

There were undoubtedly many VICRAMA'DITYAS; but which of them instituted the *era* denominated after him, is by no means obvious: for there is hardly any instance, I believe, of any sovereign or legislator that ever instituted an *era* called after him, and beginning with some memorable event, during the course either of his life or of his reign. Any one of them might have instituted the *era*; but it does not follow that he lived at the beginning of it. The author of the *Vansáváli*, and in general all those who have attempted to new model his list, say, that the *era* of VICRAMADITYA was instituted by his brother BHARTRĬHARI, or 'SUCA'DITYA, who is called 'SACWANTA on that account. He reigned fourteen years; and after his death, VICRAMA'DITYA took it up, made some corrections, and had it called after his own name. This circumstance is noticed by

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* Vol. II, p. 54.

† Asiat. Researches, Vol. I.

BERNOUILLI, from the *Tadkerat-assalatin;* but the copy in MR. HARINGTON's possession is the most explicit on this subject, and I find that it is by no means a new idea. According to some, these fourteen years are the difference between the *era* of VICRAMA'DITYA in its corrected, and the same in its original state. This 'SUCA'DITYA is called also VICRAMA'DITYA in the *Dekhin*, and is said to have begun his reign in the year of the *Cali-yuga* 3020, and to have died in the year 3034, from which they reckon the *era* of VICRAMA: but in the northern parts of *India*, they say that he began his reign in the year 3030, and died in the year 3044. Yet this BHARTRĬHARI, in the collection of tales attributed to him, alludes to another VICRAMA'DITYA, who, from the context, certainly lived long before him. Such is the uncertainty about this famous emperor, that we are obliged to distinguish between the years since the time of VICRAMA'DITYA and those of his *era*. Thus, in the *'Satrujaya-mahatmya*, we read, *that after* 466 *years of the era* are elapsed, then would appear the great and famous VICRAMA'DITYA; and then, 477 after him, 'SAILA'DITYA, or BHÓJA, would reign. In the *Ayin-Acberi*, the various dates, from the *era* of VICRAMA'DITYA, are to be reckoned from his accession to the throne, in the middle ages of the Christian *era*.

The third epoch in my list, and in most of the lists in the eastern parts of *India*, is that of 'SURACA, who was succeeded by his brother CRĬSHNA, according to the *Purán'as*. He began his reign in the year 191, and was also considered as a VICRAMA'DITYA, or rather a SAMVATICA, or author of a civil period; and of him also I took particular notice in my essay on the *Gangetic* provinces.

The next period is that of VICRAMA'DITYA, the

son of the man with the countenance of an ass. He is called in the list GANDHA-PA'LA, or fostered by an ass. This prince is omitted in several copies from the west; and between GANDHA-PA'LA and VICRAMA'DITYA, or VICRAMA-PA'LA, as he is called in these copies, there intervenes a king called SA'DAT-PA'LA. This VICRAMA'DITYA had two sons, one called TILACA-CHANDRA, who reigned only two years, and was succeeded by his eldest brother, VICRAMA-SE'NA, or VICRAMA'DITYA; and this TILACA-CHANDRA appears in the character of BHARTRI-HARI.

The next period is that of MAHA'BHAT'-SRI'MAN'-MAHA'RA'JA', or MUHAMMED the blessed, or fortunate, the great commander *of the faithful.* In various copies he is called MAHA'BHA'T'T'A'RACA, and MAHA'-BHAT'T'A'RICA. In MR. HARINGTON's list, the epithet of PARAS'U, answering to SEIFULLAH in Arabic, or the sword of God, is prefixed to his name. In all the copies from the west of *India,* he is called MAHA'-PREMA, for MAHA-PRAMA'RA, the great destroyer; and to the names of his four confidential associates, the epithet of PREMA, or PREMA'RA, is also added. Instead of PREMA, we should read PRAMA'RA, or PARIMA'RA, the destroyer; for, in the *Satrujaya-Mahátmya,* a favourite tract of the *Jainas,* he and his friends are called the PANCHA-MA'RAS, or the five destroyers. It is said there, that JINA, in his last incarnation, as GAUTAMA in the shape of a white elephant, and therefore denominated SRI-HASTI-S'ENA, having obtained eternal bliss, then, three years, eight months, and fifteen days after this event, there would appear SACRA-PANCHA-MA'RA, who would put an end to all *Dharma,* or religion *.

* Sacra, or the mighty chief.

Thus the death of GAUTAMA happened in November 617; and his death, in the *Purán'as*, and according to the *Japanese*, is placed either late in the sixth, or early in the seventh century. PRAM'ARA, the great destroyer, or PARI-M'ARA, he who destroys all round, is one of the titles of YAMA, and very applicable to MUHAMMED. The Hindus, in the western parts of *India*, are well acquainted with the famous *Cháryári* of the Musulmans, or the four friends and associates of MUHAMMED. Some, with a little straining, derive this name from the Sanscrit; and thus the four destroyers, with their leader, become the PANCHA-MA'RAS, or the five destroyers. MR. HARINGTON's list, which was brought from *Assam* by the late DR. WADE, seems to have been new modelled by the *Jainas;* as GAUTAMA is introduced there, waging war against a certain MANU.

The next subject of inquiry is the *Cumáricâ-c'han'da*, a section of the *Scanda-purán'a*. The copy in my possession was written in *Gujjarát* two hundred and thirty years ago, or in the year of VICRAMA'DITYA 1630, A. D. 1574; and in the year of VICRAMA 1796, or A. D. 1740, it was the property of a learned *Pandit*, who made several corrections in the margin, as usual in *India*. The owner of that section, 230 years ago, obviously considered it as authentic, and as making part of one of the canonical books; and the copies in general use in this part of the country do not materially differ from it. According to the context, this *Purán'a* must have been written when the *Roman* empire, probably in the east, was in the zenith of its glory; for the author mentions it as the largest in the world, and says that it consisted of no less than 18,030,000 villages, or rather parishes, and he speaks of it as existing in that powerful and extensive state in his own time. Six dates only are given in this section. The first is 'SUDRACA, or 'SURACA,

who was to appear when 3300 years, save 10, of the *Cali-yuga* were elapsed in the city of *Charchita*.

The first VICRAMA'DITYA is mentioned in the *Cumáricá-c'han'da**, in which it is declared, that after 3020 years of the *Cali-yuga* had elapsed, then would VICRAMA'RCA appear. He reigned fourteen years, and of course died in the year 3034, when the *era* of YUDHISHTIR ended, and his own began. In the list of the kings who were to appear in the *Cali-yuga*, to be found in the *Bhágavata*, *Brahmán'da*, *Váyu*, and *Vishnu-purán'as*, there are two kings, the seventeenth and eighteenth in regular succession from CHANDRAGUPTA, who reigned seven years each. The first is called VICRAMA, and the other MITRA; and they are supposed to have been originally meant for VICRAMAMITRA; who, according to some, reigned fourteen years: and in these lists, the father, or predecessor of VICRAMA, is called GHOSHA-RA'JA, or the king of thickets, which is another name for GANDHARUPA, or GADHA-RA'JA in the west. This looks like an interpolation; and the more so, as it will appear hereafter, that GHOSHA-RA'JA died in the year 440 of our *era*.

This is the VICRAMA'DITYA, after whom the present *Samvat* is supposed to be denominated; and it is the general opinion, that the first year of it is the next to that in which he died. Yet the Pandits, who assisted ABUL-FAZIL, declared that it was the first of his reign: it is also the opinion of many respectable Pandits, particularly in the western parts of *India*. This is more conformable to a passage in the *Cumáricá-c'handa*†, in which it is declared, that after 3100 years of the *Cali-yuga* were elapsed, then would 'SACA, or 'SA'LIVA'HANA, appear. By

* Paragraph. 42d. † Paragraph. 42d.

this first year of Sa'liva'hana, we must not understand it, as meant of the first of his *era;* but of the first of his reign, which is unconnected with his period. In that case, Vicrama'rca lived 56 years; his death happened then in the 57, or the first of the Christian *era*, the very year in which Sa'liva'hana, the lord and master of *Rome*, made his appearance, and after whom the *era*, in use through that empire, is denominated.

The second Vicrama'ditya is the same with Srí-Carn'a-De'va, called also Sudraca and Surasa; and is mentioned in the *Vétálapancha-vin'sati*, under the name of Vicrama-ce'sari, prime minister of the Emperor of *India*, at *Pátalí-putra-puram*. It is he, to whom a *Bráhmen* gave strong hints, to seize upon the throne, and avail himself of the infirmities of his master. He is the Vicrama'ditya mentioned by Ferishta, in his history of *India;* and whom he makes contemporary with Sapor, king of *Persia*. He is also mentioned in the *Bhója-charitra;* for, when Ra'ja'-Munja wanted to destroy secretly young Bhója his nephew, the latter, being apprised of it, effected his escape, and wrote to him several couplets, well known to the learned; wherein, reproaching him with his dark and base scheme, he says, " Srí-Carn'a-Ra'ja-Vicrama is no more, and he carried nothing along with him out of his immense treasures; but died like another man." From that circumstance, the title Srí-Carn'a-Ra'ja-Vicrama was conferred upon Bhója by posterity. It seems that he attempted to establish an *era* of his own, which however did not last long. The Pandits, who waited upon Abul-Fazil, informed him, that several princes had attempted to set up *eras*, denominated after their own names: and this is also asserted by many learned men now; but these new *eras* were soon doomed to oblivion.

The third VICRAMA'DITYA was the son of GARDDABHARUPA, or RASHABHA-SE'NA, or the man with the countenance of an ass. That name is pronounced GADHA'-RUPA, or GANDHA-RUPA, in the spoken dialects; and he is called also GADHENDRA, or the lord of asses, and GHOSHA-RA'JA, or the king of thickets and bushes.

In the list of the emperors of *India*, in the annexed table, he is called GAND'HA-PA'LA; and, at *Ujjayiní*, his name is GANDHA-RUFFSENA, according to DR. HUNTER of our Society *. A. ROGER writes it VENEROUTFSI, or GUENEROUTFSI: but says, that it was the name of the sister of VICRAMA'DITYA, who, they insist in the *Deccan*, was himself the son of a *Bráhmen* of *Benares*, called CHANDRA-GUPTA; and there is a fulsome account of the birth of this VICRAMA, in the first section of the *Sinhásana-dwátrinśati*, called *Vicrama-Upác'hyána*. "In *Gurjjara-man'dalam* are the *Sábharamatí*, and *Mahí* rivers: between them is a forest, in which resided TAMRALIPTA-RĬSHI, whose daughter married king TAMRAS'ENA. They had six male children, and one daughter, called MADANA-REC'HA'. The king had two young lads, called DEVA-S'ARMA' and HARI-S'ARMA', whose duty chiefly was to wash, every day, the clothes of their master, in the waters of the nearest river. One day, as DE'VAS'ARMA' went, by himself, for that purpose, he heard a voice saying, tell king TAMRA-S'ENA to give me his daughter; should he refuse me, he will repent it. The lad, on his return, mentioned the whole to his master; who would not believe it, and next day sent HARI-S'ARMA' to the river, who heard the same voice also, with the threats in case of a refusal. The king was astonished; and, going himself, heard the voice also. On his return,

* Asiat. Research. Vol. 6th. p. 35.

he assembled his council; and, after consulting together, it was agreed, that the king should go again, and ask him who he was. The supposed spirit, being questioned, answered, I am a *Gand'harva*, or heavenly choirister; who, having incurred INDRA's displeasure, was doomed to assume the shape of an ass. I was born in that shape, in the house of a *Cumbhacára*, or potter, in your capital city; and I am daily roving about in quest of food. The king said, that he was very willing to give him his daughter; but that he conceived, that such an union was altogether impossible, whilst he remained in that shape. The GANDHARVA said, trouble not yourself about that; comply with my request, and it will be well with you. If, says the king, you are so powerful, turn the walls of my city, and those of the houses, into brass; and let it be done before sun-rise to-morrow. The GANDHARVA agreed to it, and the whole was completed by the appointed time; and the king, of course, gave him his daughter." Several learned Pandits inform me, that this GAND'HARVA's name was JAYANTA, the son of BRAHMA'. When cursed by INDRA, he humbled himself; and INDRA, relenting, allowed him to resume his human shape in the night time; telling him, that the curse should not be done away, till somebody had burned his ass-like frame.

It is said, in the *Vicrama-Upác'hyàna*, that the mother of the damsel spied them once in the night; and, to her great joy, found that the GANDHARVA dallied with her daughter in a human shape. Rejoiced at this discovery, she looked for his ass-like form, and burned it. Early in the morning, the GANDHARVA looked for this body of his, and found that it had been destroyed. He returned immediately to his wife, informing her of what had happened, and that his curse being at an end, he was obliged to return to heaven, and leave her. He informed her

also, that she was with child by him, and that the name of the child was to be VICRAMA'DITYA: that her maid was with child also, and that the name of the child should be BHARTRĬ-HARI. He then left his wife, who resolved to die; and, ripping up her own belly, she took out the child, and intrusted it to the care of a *Máliní*, or the wife of a gardener, or a flower woman. 'Go,' said she, 'to some distant place, and there remain concealed; because my father will attempt to destroy the child.' The *Máliní* went to *Ujjayiní*, with the maid; and from the signal preservation of the child, in that city, it was also called *Avanti*, from the Sanscrit *ava*, to preserve.

In the *Agni-purán'a*, the father of the damsel is called SADASVAS'ENA, in the *Bhávishya-purán'a* VASUD'HA': FERISHTA says that his name was BASDEO; whom he represents as emperor of *India*, and residing at *Canouge*; but the author of the *Vicrama-Upác'hyána* says that he was a powerful prince, in the west of *India*, and possessed of the countries which we find, afterwards, constituting the patrimonial territories of the *Balahara*, which included *Gurjjarásht'ra* (or *Gujjarát'*,) with some adjacent districts. In the *Ayin-Acberi* he is called SUDHROWSHENEH, and at *Ujjayiní*, SUNDERSENA, according to DR. HUNTER, who says that this incarnation took place in the time of that prince *. This is obviously the history of YESDEJÍRD, son of BAHRAM-GÓR, or BAHRAM the ass, king of *Persia:* the grand features are the same, and the times coincide perfectly. The amours of BAHRAM-GÓR, with an *Indian* princess, are famous all over *Persia*, as well as in *India*. According to D'HERBELOT, there is still a romance in Persian, called the amours of BAHRAM and GUL-ENDAM, the *Indian* princess.

* Asiat. Researches, Vol. VI. p. 35.

This VICRAMA'DITYA ascended the throne of *Málava*, in the year 441, reckoning from the first of 'SA'LIVA'HANA; and 753 years after the expiation of CHA'NACYA, according to the *Agni-purán'a*, answering equally to the year of CHRIST 441. In the *Bhavishya-purán'a*, in which the years are omitted, VICRAMA'DITYA is placed in the same order of regular succession: conformably also to the list of the emperors of *India*, in the annexed table. DU FRESNOY, in his Chronological tables *, says, that the first year of his reign answered to the 441 of the Christian *era;* and the authors of the Ancient Universal History place this event in the 442d: and surely no greater degree of precision could be expected †.

This VICRAMA was the son of the man with the countenance of an ass; but his grand father was ATI-BRAHMA', in the *Ayin-Acberi*, and whose father was BRAHMA'. NOW YEZDEJ'IRD, called ISDIGERTES by the *Greeks*, was the son of BAHRAM with the nick name of GUR or the ass. His grand father was another YEZDEJIRD, called also VARAMES or BARAM, with the title of ATHIM, and answering to ATI-BIRMAH; and whose father was called BAHRAM, the same with BRAHMA, BIRMAH, or BAHRAM, as his name is spelt by TIEFFENTHALER, and in many MSS. lists. The *Greeks* pronounced it VARAMES, and even BARAM, as it is written by THEOPHYLACT SIMOCATTA ‡. JAYANTA, the son of BRAHMA', incurred the displeasure of INDRA, king of the elevated grounds of *Meru*, or *Turkestan;* and was doomed, by him, to assume the shape of an ass, in the lower regions. BAHRAM-GUR, or the ass, likewise incurred the displeasure of the *Khacan*, or mortal king of

* Du Fresnoy, Vol. 2d. p. 408.
† Anc. Univ. History, Vol. 9th. p. 278.
‡ See Photii Bibliotheca. p. 87.

Meru. He ascended the throne of *Persia;* and, after having overcome his enemies, he went to *India*, in disguise, to the court of a powerful prince of that country, who took particular notice of him, on account of his valour and personal merit. The Indian prince loaded him with caresses and honours; and gave him his daughter, with an immense fortune; when he was recognized by some nobleman, who had carried the usual tribute to *Persia*. Being thus discovered, he returned to his own country, after an absence of two years. The Hindus assert, that he refused to take his wife along with him; and that, in consequence, she killed herself. They shew, to this day, the place where he lived, about one day's march to the north of *Baroach*, with the ruins of his palace. In old records, this place is called *Gad-'hendra-puri*, or the town of the lord of asses. The present name is *Gosherà*, or *Ghojárá* for *Ghosha-ráyá* or *Ghosha-rája:* for, says my Pandit, who is a native of that country, the inhabitants, being ashamed of its true name, have softened it into *Ghoshera*, which has no meaning. BAHRAM, the ass, had 12000 dancing women sent to him, from *India;* and it is supposed, that those of that profession, in the same country, to this day, are descended from them. This BAHRAM had been brought up among Christians, in *Arabia;* and king NOOMAN, who had been intrusted with his education, died a Christian. But BAHRAM abhorred the Christian name, and cruelly persecuted all those of that profession; and this was the cause of a bloody war with the Roman emperors, in which the armies of BAHRAM were repeatedly defeated; and once forced to plunge into the *Euphrates;* when above 100,000 men were drowned. His son inherited all his rancour; but, being beloved by his troops, the emperors of *Constantinople* were obliged to submit, and to pay a yearly contribution.

This BAHRAM, or VICRAMA'DITYA, the Hindus claim as their own countryman; for, in the appendix to the *Agni-purán'a*, he is declared to be *Carn'ànsya*, or of the family of *Srí-Carn'a;* which is possible on the maternal side.

This is the VICRAMA'DITYA, whose younger brother was called BHARTRĬHARI; famous for his piety and learning; and who succeeded his father, though the youngest: but being disgusted with the world, on account of the infidelity of his favourite wife, he abdicated the throne of *Málava*, and retired to *Benares;* where he ended his days in devout contemplation: though many are of opinion that he is still alive. When he left the throne, his brother was gone to distant countries; and the whole kingdom being thrown into confusion, was soon overrun with demons, the chief of whom had taken possession of the throne; and it was with the utmost difficulty that VICRAMA drove him away, by gentle means, and even conciliated his favour, and thereby obtained a boon from him, to sit upon the throne for 100 years.

It is the general opinion, that VICRAMA'DITYA put his brother SUCA'DITYA, or BHARTRĬHARI, to a most slow and cruel death, by severing his head, with a knife, both small and bad. His putting him to death is mentioned by HOLWELL, and MR. WILKINS *.

BHARTRĬHARI, according to the Hindus in general, withdrew to *Chun'ar* near *Benares*, where he remained some time; when his brother gave him a purganah, or small district, called to this day *Bhartari*, and

* Asiat. Researches, Vol. 1st. p. 129.

Bhittri, after him; and which is to the eastward of the mouth of the river *Gomti*. There are the remains of a pretty large fort, with the ruins of his palace. Near it is a stone pillar, with an inscription, containing only a few couplets from the *Mahá-Bhárata*: it is however remarkable, on account of the curious connexions of the letters.

Being obliged to go often to *Benares*, he raised an artificial hill, at some distance from the northern banks of the little river *Burn'á*, to the north of the city, exactly in the shape of the hill of *Chunár*, on which he resided. It is a work of great magnitude; and near it is a small village, called, from that circumstance, *Páhár-pur*, or Hill-burgh.

In the lists of the kings of *Gwalior*, both MSS. and printed, it is declared, that SU'RYA-SE'NA, or SU'RYA-PA'LA, called also SO'MA-PA'LA, built the fort of *Gwalior*, in the year 332 of VICRAMA'DITYA, by whom we must understand the son of BAHRAM-GO'R; and thus, the building of this famous citadel took place in the year 773; and probably, on account of the astonishing progress of the Musulman invaders, on the banks of the *Indus*. The kings of that country resided at a place called *Cánti* or *Cántipura* (now *Cotwall*, nine cos to the north of *Gwalior*, according to LIEUT. WILSON's information). The origin of this little kingdom is mentioned in the prophetic chapters of the *Váyu*, *Brahmán'da* and *Vishnu-purán'as*: but the latter is more explicit, on this subject, than the others. After the death of PULO'MA', in 648, there appeared, in *Anu-Gangam*, or the *Gangetic* provinces, a king, called VIS'VAS'PHATICA, or VIS'VA-S'PHURJI; who drove away the *Bráhmens* and *Cshettris*, and raised to that dignity persons of the lowest classes. After him came the *Nágas* or *Nácas*, who divided among themselves *Anu-Gáng-*

am, and the countries to the westward: some resided at *Padmávatí* (or *Patna*;) others at *Prayága*, (or *Allahabad*). There was a branch of them who settled at *Cánti* (now *Cotwall* near *Gwalior*,) and another at *Mathurá*: and there were nine families of them. There is still a tribe of the *Nágas*, or *Nácas*, on the banks of the *Jumná*, about *Calpi*. They seem to form a singular tribe, but I am otherwise unacquainted with them.

Thus SU'RYA-PA'LA, or SÓMA-PA'LA, built this fortress, in the year 773, and of VICRAMA the son of BAHRAM-GU'R 332; which computation is further confirmed by another epoch. AJA-PA'LA or GEBAL, is said by FERISHTA', to have been assisted in his wars against MAHMUD, by TANDEPA'LA king of *Gwalior*. There is one DHAND'HUPA'LA, in the Persian list of its kings, and the sixteenth from its foundation. He was the friend and ally of GEPAL, and their combined forces were defeated by MAHMOOD, about the year 1017.

The dynasty of SU'RYAPA'LA consisted of eighty-five princes, according to the prediction of GÓPA'CHALA the hermit, (called in the Persian list GUA'LIPA';) and ended in the person of TE'JA-CA'RN'A, 103 years before *Gwalior* was taken by SHAMSEDDIN, or FIROZE the 2d; (who ascended the imperial throne in 1289;) having lasted above 410 years, which is certainly too little for 85 reigns: but these inaccuracies are not uncommon with Hindu chronologers. LIEUT. WILSON informs me, that a *Bráhmen*, in the service of CA'NDU-JEE, has sometime since written a history of *Gwalior*, in Sanscrit, in which he places SU'RYA-PA'LA, or SÓMA-PA'LA, in the *Dwapar* age: and the author declares, that his account is conformable to ancient inscriptions, still existing on the rocks of *Gwalior*; and

that the chief circumstances in his history are entirely taken from them. If so, neither the inscriptions, nor the work itself deserve much credit. BAHRAM, with the epithet of GÛR, in Sanscrit GARDABHA, or the ass, is the founder of the *Garddabhína* dynasty, mentioned in the prophetic chapters of the *Puráńas*. The Hindus say, that when GARDDABHA withdrew from *India*, he left his wife and her maid behind, and that both were with child by him; but Persian writers assert, that he took his wife with him to Persia with her immense fortune. In RAGHUNA'T'H's list, we find, that the son of GADHA'-PA'LA, or GARDDABHA, was VICRAMAD'ITYA; who had two sons TALACA-CHANDRA, who reigned only two years, and another called VICRAMA'DITYA also, who succeeded him. According to Persian history, GARDDABHA had a son called YESDEJIRD, who succeeded him. This prince had two sons FIROZE, the eldest, and HORMUZ the youngest, sirnamed the wise; whom, on account of his wisdom, he appointed for his successor; and, to FIROZE, he gave the government of *Sigistan* and *Mecran*. The account of these two brothers has much affinity with what they relate, in *India*, of VICRAMA'DITYA and BHARTRĬHARI. Some say that VICRAMA'DITYA put him to death; others, that he banished him to distant countries. Be this as it may, they show the ruins of his place of abode in *Gujjarât'*, at *Ujjayiní*, and near *Benares*. The dynasty of the *Gardabhínas* is probably that of the descendants and successors of BAHRAM GÛR in *Persia*. The princes in the N. W. parts of *India* were vassals of the Persian kings, at a very early period; and the father-in-law of BAHRAM-GÛR used to send a yearly tribute to them. According to the Hindus, he was not emperor of *India*, but only a powerful king in the western parts of that country, and his capital city was *Cambát* (or Cambay). It is not improbable

that FIROZE spared the life of his brother, and banished him to distant countries; and spread a report of his death to prevent any further commotion in his favour. SHIROVYEH, the son of KHOSRU PURVIZ, caused his seventeen brothers to be secretly conveyed to *India;* and it was firmly believed, in the west, that he had put them all to death: yet there is hardly any doubt, that the kings of *Oudypoor*, and the *Marhattas*, are descended from them and their followers, as it will appear in the appendix. In many copies of RAGHU-NA'TH'S list, instead of GADHA'-PA'LA, we read CSHE'MA-PA'LA, or some other name. Next to him, a prince is introduced, called SADAT-PA'LA; probably for SADA'S'VA-PA'LA, the name of the father in-law of GADHA'-PALA, or BAHRAM-GÛR.

As the famous emperor BHÓJA is not noticed by foreign writers, the period in which he lived is involved in much obscurity. In the *Ayin-Acberi**, BHÓJA is said to have ascended the throne, in the year 541 of VICRAMA'DITYA'S *era;* which is impossible; for it would place BHÓJA'S accession to the throne in the year 982; and, therefore, there would be no room, either for his reign, which was a long one, nor for those of his two successors, the last of whom died in 1009. In the *'Satrujaya-mahatmya*, we read 477 instead of 541, and this will place BHÓJA'S accesssion in the year 918 of CHRIST. But the author of the above treatise uses another mode of calculation, which will give a difference of four years. In the year 466 of the *era*, says he, was VICRAMA'DITYA, who reigned 108 years; and 477 years after, appeared 'SALA'DITYA, in *A'sá-rápura*. The era is that of 'SA'LIVA'HANA, and as

* Vol. 2d. p. 55.

the *Jainas* reckon from the death of VICRA'MADITYA, the whole will stand thus, 466+79−108+477=914, for the year of CHRIST, in which BHÓJA ascended the throne. MAJOR MACKENZIE, in his extracts communicated to the Society, says, that in the *Dekhin* it is recorded of BHÓJA, that he reigned fifty years five months and three days; and that the famous CA'LI'-DA'SA lived at his court. Accordingly, BHÓJA died in the year 965 or 969, if we place his accession in the year 918. The author of the *Satrujaya-mahátmya* places the accession of VICRAMA'DITYA in the year of CHRIST 437, instead of 441; and when we read, in the *Ayin-Acberi*, that BHÓJA ascended the throne in the year of VICRAMA'DITYA 541, this might possibly be a mistake for that of his death; and such mistakes are unfortunately but too frequent with Hindu writers; and his death would, in this case, fall in the year 977; or in 982, if we reckon from the year 441. This account is the most probable, as it leaves room for the reign of his adopted son JAYA-NANDA, who died without issue, when CHAITRA-PA'LA, or JYTE-PA'LA of the *Towara* tribe, was raised to the throne. After fighting several unsuccesful battles with SULTAN MAHMOOD, he put an end to his own life, in the year 1002, and was succeeded by his son MAHE'NDRA PALA. This CHAITRA-PA'LA or CHANDRA-PA'LA, and in the spoken dialects CHAITRA-PA'LA, JYTE-PA'LA and GEPAL, by Musulman writers, is called CHAITRA-CHANDRA in the *Bhavishya;* which cannot be explained otherwise, than by supposing, that the author meant, that he was called indifferently either CHAITRA-PA'LA or CHANDRA-PA'LA. He was a most powerful prince, and his authority was acknowledged all over *India;* and he is mentioned in the *Ayin-Acberi**, under the name of CHANDRA-PA'LA: but he is placed erro-

* Vol. 2d. p. 55.

neously before RA'JA'-BHÓJA. This is the VICRAMA'DITYA, who is made to wage war against MAHABHA'T and the *Mahábhatádicas*, MUHAMMED and the *Muhammedans*. No Hindu prince could have waged war against MUHAMMED; but the whole is an allusion to the subsequent wars with his followers; and in the same manner we must probably consider the wars of the other VICRAMAS with 'SA'LIVA'HANA. The Hindus have confounded SULTAN MAHMOOD with MUHAMMED, whom they claim as their own countryman, as well as 'SA'LIVA'HANA, whilst neither of them ever was in India.

The propensity of the Hindus, to appropriate every thing to themselves, is well known. We have noticed before their claims to BAHRAM-GÛR, and his descendants; and in the same manner, they insist, that ACBAR was a Hindu in a former generation. The proximity of the time, in which this famous emperor lived, has forced them, however, to account for this in the following manner. There was a holy *Bráhmen*, who wished very much to become emperor of *India;* and the only practicable way for him was to die first, and be born again. For this purpose he made a desperate *Tapasya*, wishing to remember then every thing he knew in his present generation. This could not be fully granted; but he was indulged with writing upon a brass plate, a few things which he wished more particularly to remember; then he was directed to bury the plate, and promised that he would remember the place in the next generation. MUCUNDA, for such was his name, went to *Allahabad*, buried the plate, and then burned himself. Nine months after he was born in the character of ACBAR, who, as soon as he ascended the throne, went to ALLAHABAD, and easily found the spot where the brass plate was buried. Thus the *Hindus* claim MUHAMMED and ACBAR as their own; exactly like the *Persians*

of old, who insisted that ALEXANDER was the son of one of their kings; so that, after all, they were forced to submit to their countrymen only. But let us return to MAHA'BHAT, or MUHAMMED.

The *Hindus* say, that the son of a certain king of *India*, being disgusted with the world, turned pilgrim, and went to MÓCSHE'SWARAST'HA'NA, (or *Mecca*). In his way thither, and in Arabia, he stopped at the house of a *Bráhmen*, who received him kindly, and ordered his daughter to wait on him, as usual. Whilst asleep, the cloth, with which his loins were covered, was accidentally defiled. When he awoke, he took it off, and concealed it in a corner of the house, in some hole, and out of the sight of the damsel, as he thought. Being from home, to perform his ablutions, in consequence of this nocturnal defilement, the damsel came at the usual hour; and her courses suddenly making their appearance, she was much distressed, and looking every where for some cloth, she spied the bundle—in short, she conceived. He departed for *Mecca*; and some months after, the parents of the damsel, and herself, were thrown into the greatest confusion, as may be imagined.

The holy man was considered as the author of their disgrace, though the damsel exculpated him: yet she could not account for her present situation. She was like HAGAR, turned out of the house, into the wilderness, with her son: where they were miraculously preserved, both being innocent. Some years after, the holy man returned, unconscious of his having been the cause of so much uneasiness to the family of the hospitable *Bráhmen*.

After much abuse, the matter was explained; but

the son of the damsel could not be admitted to share with his relatives, or even to remain in their communion. He was, however, honourably dismissed, with his mother, after they had given him a suitable education, and rich presents; and they advised him to shift for himself, and to set up a new religion, as he could not be considered as a member of the old one, on account of his strange birth, or rather conception. When advanced in years, he wished to see his paternal relations and *India;* and to persuade them to conform to his new doctrine; but he died in his way thither, at *Medina*, near *Candáhár*. This *Mediná* is *Ghazni*, called emphatically the second *Mediná*, from the great number of holy men entombed there: and it is obvious, that the *Hindus* have confounded MUHAMMED with SULTAN-MAHMOOD, whose sumptuous Mausoleum is close to that city. Thus we see, that the account they give of MUHAMMED is a mere rhapsody, retaining some of the principal features of the history of ISHMA'EL, HA'GAR, MUHAMMED himself, and SULTAN MAHMOOD.

This *Samvat*, or *era*, of MAHA'BHAT, was early introduced into India, and the *Hindus* were obliged to use it, as they do now in all their civil transactions; and thus MUHAMMED became at least a *Sambatica* or *Santica*. According to the rules laid down by the learned in *India*, MOHAMMED is certainly a *'Saca* and *'Sacéswara*, and is entitled to the epithet of VICRAMA. He is a *'Saca*, or mighty chief; and, like other *'Sacas*, he killed his millions: he is *'Sacéswara*, or the ruler of a sacred period, still in use in *India*. For these reasons, the *Pandits* who assisted ABU'L-FAZIL, did not scruple to bestow the title of VICRAMADITYA upon him; and even to consider him as the real worthy of that name; and in order to make the *era*, or at least the time of VICRAMADITYA's appearance,

coincide with the *era* of MUHAMMED, they have most shamefully distorted the chronology of the appendix to the *Agni-purán'a*.

AGNIPURAN'A,		
Sáliváhana, Naraváhana	.....	84
Váusá-váli, or Putra-rájas, that is to say the royal offspring,		100
		184
A'ditya,	.....	55
Brahmá-raja,	.....	87
Ati-Brahmá,	.....	31
Sadás'va, Harsha Mégha,	.....	80
1st. of Vicramáditya,	.....	437

AYIN ACBERI,		
Sáliváhana,	.....	1 or 0
Naraváhana,	.....	100
Putra-rájas,	.....	100
		200
A'ditya,	.....	86 73
Birmáhraj,	.....	30
At-Birmáh,	.....	90
Sudhrowsheneh, for Sadásva-sena,	.....	80
Heymert,	.....	100
Gundrup,	.....	35
1st. of Vicramáditya,	..	621 7 3

In the MSS. copy of the *Ayin Acberi* used by TIEFFENTHALER, the days and months were omitted. In several we find seven months, and three days once only; and the repetition in other MSS. is owing probably to the carelessness of transcribers. Here one year only is allotted to SA'LIVA'HANA, and 100 to NARA-VA'HANA, who is the same with SA'LIVA'HANA, to whom one only is allowed, in order, probably, to keep up his rank and place in the list. It is also to be observed, that where we put 0 at the beginning of a chronological list, the Hindus put 1, as we used to do formerly; and that year should be rejected in calculations; but this precaution is often neglected, even in Europe.

The first year of SA'LIVA'HANA, but not of his *era*, was the 3101 of the *Cali-yuga*, answering to the first of the *Christian era*, according to the *Cumárica-c'hani'da;* and consequently, this VICRAMA'DITYA's accession, to the throne, happened 621 years after

the birth of CHRIST, according to the MSS. perused by TIEFFENTHALER; and 621 years 7 months and 3 days, according to others: and the *Hejra* began, when 621 years 6 months and 15 days, of the *Christian era*, were elapsed; the difference is surely trifling. That the *Pandits*, who assisted ABUL-FAZIL, pointed to MUHAMMED, under the name of VICRAMA'DITYA, is confirmed also from two dates in the *Ayin Acberi*, in which the years, said to belong to VICRAMA'DITYA's *era*, are really to be reckoned from the beginning of the *Hejrá*. Probably it was meant as a compliment to the benevolent ACBAR, whose tolerant spirit could not fail to endear him to the Hindus. Even in the time of AURENG-ZEBE, the most intolerant of all princes, when RAGHU-N'ATHA wrote the *Vansâváli*, at his command, he introduced MUHAMMED by name, with the title of 'SRI'MA'N-MAHA'RA'JA. In this attempt, the *Pandits*, who assisted ABUL-FAZIL, most shamefully disfigured the chronology of the supplement to the *Agni-purán'a*. Of S'A'LIVA'HANA and NARAVA'HANA, they made two distinct persons; as well as of BAHRAM, with the title of GÛR, in *Persian*, and HAIMAR, or the wild ass, in *Arabic*. Thus they introduced HAIMAR or HAYMERT, and GÂR or GANDA-RUP: to the former they allotted 100, and to the latter 35 years; and they had the assurance to tell ABUL-FAZIL, that it was declared, in their sacred books, that HAIMAR having been killed in battle, his soul passed into the body of GANDA-RUP *. They were also forced to lengthen the reigns of the intermediate princes: thus one abyss calls to another, and a single lie requires often fifty to support it.

The accession of VICRAMA'DITYA, the son of

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* Ayin Acberi, Vol. 2. p. 54.

BAHRAM-GÛR, to the throne, is placed, in the supplement to the *Agni-puráńa*, A. D. 437; and the same date is given, in the *Satrujaya-mahátmya*, as we have seen before *. This event is placed, however, in the year 441, or 442, by chronologers in the west; and in the appendix to the *Agni-puráńa*, the accession of ADITYA is placed in the year of CHRIST 185; but, in the *Cumáricá-c'hańda*, it is declared to have taken place in the year 191: the difference is six years, which added to 437, or rather to 436, will place the same event in the year 442.

The name of the emperors, called MUHAMMED, or MAHMOOD, is generally written, and pronounced, by Hindus, MA'HABHAT', which implies a great warrior: hence he is called also MAHA' BA'HU, VÍRA-BA'HU, and MAHA'-VÍRA-BA'HU. It is written also MAHA'-BHAT'T'A'RACA, MAHA'BHAT'T'A'RICA, and MOHA-BHAT'T'A'R. In the *Vansáváli*, he is styled SRÍMA'N-MAHA'-RAJA, the prosperous (or on whom blessing and happiness) the great commander. In the list of kings, the titles are generally placed after the proper name: thus BHO'JA is dignified with the title of SRÍ-CARN'A-RA'JA-VICRAMA, in the appendix to the *Agni-puráńa*. In the *Vansáváli*, as new modelled by the *Jainas*, the epithet of PARAS'U is prefixed to his name, and not improperly; because, like another PARAS'U, he and his successors destroyed the kings of the earth. PARAS'U signifies a sword, or scimiter; and here, perhaps, alludes to the epithets of *Seisullah*, (the sword of GOD,) and of *Zulfecar*, so famous among his followers.

It is said, in the *Vrĭhat-cat'ha*, that he was from *Ananga-désa*, or the country of ANANGA, another name for CA'MA'DE'VA, and supposed, by *Pandits*,

* See before, p. 157.

to be to the westward of *India*. In the *Vansávali*, instead of *Ananga*, it is written *Benga*, or *Bengal*. The HA'MIR, or HOMAR', introduced as his successor, in this list, is probably meant for OMAR, who, as early as the year 636, began to form regular plans, for the invasion of *India*; and actually sent a large detachment, by sea, to invade the *Delta* of the *Indus*: or rather, this HA'MIR is the famous HA'MÍR, general of MOAVYEH *, who waged a long and bloody war, with the Hindus, in the countries bordering upon the *Delta*. MOAVYEH began his reign in the year 661, and died in 679; and the wars of HAMIR, with the Hindus, took place about the latter end of his reign. In the *Vansávali*, he is called HA'MÍR-SINHA, and HA'MÍR-SE'NA: but, in many copies, the first syllable of his name is dropped, and we read MÍR-S'E'NA, DÍRS'E'NA, and even DÍSENA; and, in some copies, he is said to have been a native of *Ananga*.

The title 'SRÍMA'N-MAHA'-RA'JA was probably bestowed upon MAHA'-BHAT', in compliment to AURENG-ZEBE, by whose order the *Vansávali* was written. The *Hindus*, in general, never speak ill of MUHAMMED; and they think that he was a good man; but they by no means entertain the same idea of his disciples.

During the time of MUHAMMED, neither he, nor his followers, ever troubled themselves about *India*: but soon after his death, and in the year 636, OMA'R began to devise means for the invasion of that country; and the first step he took, was to build *Basrah*, or *Bussorah*. He then sent MAGAIREH-ABUL AAS, according to the *Ayin-Acberi* †, who, setting off from *Baharein* by sea, invaded the west-

* Ayin Acberi, Subah Tatah.

† Vol. 2d. Account of Sircar Tatah, p. 147.

ern parts of the *Delta* of the *Indus*: but meeting with unexpected resistance, he was defeated, and lost his life; and as OMAR died in 641, this expedition must have taken place between these two years, and probably in 639 or 640. OTHMAN, his successor, attempted an invasion by land; but having sent people to survey the roads, he was deterred by their report. ALI, after him, sent a general, who effected some trifling conquests, on the borders of *Sind*. MOAVYEH sent twice his general AMIR, or HA'MIR; but, after long and bloody conflicts, he was forced to desist. Under the Caliph WA'LID the conquest of *Sind* was at last effected by MUHAMMED-CASIM, A. H. 99, or of CHRIST 717 †.

The rapid conquests of OMAR, and his successors, through *Iran* and *Turan*, and their constant and unrelenting attempts upon *India*, though not always successful, particularly at the beginning, could not but alarm very much the princes of that country; who thus soon became acquainted with the *Mahá-bhat'ádicas*, MUHAMMED their chief, and the intolerant spirit of their new religion.

Let us now pass to the second part, from the first year of VICRAMA'DITYA, to the death of PRITHWÍ-RA'JA, and of JAYA-CHANDRA. In this part, the appendix to the *Agni*, and also to the *Bhavishya-puran'as*, agree pretty well with the *Ayin-Acberi*, in regard to the number of kings, and the order of succession. There is, however, in the *Ayin-Acberi*, a material difference; for three kings, who are placed after BHO'JA, in the two first lists, are transposed in the *Ayin-Acberi*, and put before BHO'JA, and in an inverted order of succession. These are RA'MA-CHANDRA, (called there erroneously KURRUM-

* Vol. 2d. Account of Sircar Tatah, p. 147.

CUND) CHANDRA-PA'LA, and MEHE'NDRA-PA'LA. The reason of this transposition is, that the *Pandits*, who assisted ABUL-FAZIL, having placed the accession of BHO'JA 110 years before the death of JAYA-CHANDRA, in 1194, that is to say, in the year of CHRIST 1084, there was no longer room for these three kings; and they concluded, that they must have reigned before BHO'JA, particularly as they found there a king, called also MAH'ENDRA-PA'LA, the grand-father of BHO'JA. Another mistake, in the *Ayin-Acberi*, is the introduction, not only of a collateral dynasty, but the metamorphosing the place of their residence into a king.

The succession of kings, from VICRAMA the son of GARDABHA, to JAYA-CHANDRA, stands thus in the appendix to the *Agni-purán'a*.

VICRAMA'DITYA - - - 100 years
CHANDRA-SE'NA, - - - 50
SU'RYA-SE'NA, - - - - - 85

CHANDRA-S'ENA is omitted in the *Ayin-Acberi*,

'SACTI-SINHA, - - - - 85

In his time the *era* of 'SA'LIVA'HANA prevailed over that of VICRAMA'DITYA.

C'HA'DGA-SE'NA, - - - 85

he resided at *Ujjayiní*,

At that time A'TACA, called VA'TACA in the *Purán'as*, reigned at *Dhárá-nagara*, for the space of 190 years, or rather his dynasty. SUC'HA-S'EN'A or SUMUC'H-SE'NA, and after him C'HADGA-SENA reigned at *Chittracuta* (in *Bundelcund*). The first reigned 88, and the second 86 years; and these appear to be collateral dynasties.

Then came MAHE'NDRA-PA'LA, called VIJAYANANDA in the *Ayin-Acberi*, and these two epithets imply a great conqueror. It is said, that he reigned

100 years at *Yógini-pura*, or *Dilli*; but it is a mistake, for the MAHE'NDRA-PA'LA, who reigned in that city, lived after BHÓJA. After his death, MUNJA *was appointed regent, during the minority of his son* BHÓJA. He resided at a place called *Sonitpura*, and reigned 86 years. After him, BHÓJA reigned in the *Dekhin*, 91 years. He was succeeded by JAYA-NANDA, sometimes, but erroneously, called JAYA-CHANDRA, and he reigned 89 years. Thus, the compiler of this list seemingly places the death of JAYA-NANDA 1095 years after the accession of VICRAMA'DITYA, the son of GARDDABHA, to the throne; or in the year of CHRIST 1480; thus confounding together this VICRAMA'DITYA, with the one after whom the *era* is supposed to be denominated. In this manner, he has carried back the first year of SA'LIVA'HANA, 441 years before CHRIST; and the expiation of CHA'NACYA and CHANDRAGUPTA, 753 before the same *era*. His idea however, was, that JAYA-NANDA died in the year 1095 of VICRAMADITYA's *era*, answering to the year of CHRIST 1039: and as BHÓJA reigned only 50 years, instead of 91, a further correction will place the death of JAYANANDA in the year of CHRIST 998, which is pretty near the truth. These inconsistencies and contradictions, so frequent among *Hindu* chronologers, are disgustful in the last degree, and must greatly retard the progress of historical research.

He was succeeded by CHAITRA-PA'LA, the son of RA'MA-CHANDRA, a powerful zemindar, in the country of *Gauda, in Málava*, and of the *Tomára* tribe. In the *Ayin-Acberi** we read, that, when JAYA the son of BHÓJA died, there was not found any one of the *Pomára* or *Powár* tribe, worthy to

* Vol. 2d. p. 56.

wear the crown; on which account, CHYTERA'L, an eminent zemindar, was chosen king; and he founded the *Tomára* dynasty.

In these three lists, we find two dynasties introduced, the *Tomára* and the *Chauhán:* but these were collateral, at least for some time; as is obvious from the context of the appendix to the *Agni-purán'a*, in which it is declared, that JIDAHA'NA, called PRĬTHWÍ-RAJA in the *Ayin-Acberi**, was defeated, and killed in battle, in the country of *Sambhala*, by the *Chauháns*, who thus became kings of *Yóginí-pura*, or *Dílli*. This happened, says ABUL-FAZIL, in the year of VICRAMA'DITYA 848 (it should be 488); and as the first year of VICRAMA'DITYA is made in that section, to correspond with the first of the *Hejra*, the death of JIDAHA'NA happened in the year of CHRIST 1110. This is further confirmed by another passage from the same author†, in which he says, that the dynasty of BALA-DEO, or BILDEO, the *Chauhán*, lasted 83 years, and seven months, that is to say, from the death of PRĬTHWÍ-RA'JA, who was slain by BALDEO, to the death of PITHAURA', in the year 1192, or of the *Hejra*, 588: and from the beginning of the *Hejra*, to the year 1110 of CHRIST, there had elapsed exactly 488 *Hindu* or *Lunisolar* years‡. Accordingly, these two dynasties will stand thus:

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* Vol. 2d. p. 118. † Vol. 2d. p. 115.
‡ Vol. 2d. p. 118.

The TOMA'RA *Family.*

Ràma-Chandra, *Zemindàr of Gau'da did not reign.*

Chaitra-pála *his son, emperor of India, had two sons;*

Mahéndra-pála, *emperor*	Raya-séna, *called also* Ananga-pàla, *and* Eca-pàla, *builds* Dìllì, *A. D.* 1050.		CHAUH'ANA Family.
	Rána Bádi		Bahusáli
	Jidahàna, *killed in Battle by Bala-deva A. D.* 1110.		Vis'alàcsha
	had two sons.		Sóma-déva
			Bala-déva
			Naga-déva
			Cirtti-pála
Vigahána, *withdraws to Gaudá his native country.*	Sanca-pàla, Cirtti-pàla, Anangapàla.		PRI'THWI-RA'JA, *died A. D.* 1192.

In the account of Subah *Dílli*, by ABUL-FAZIL*, the list of the *Chauhán* princes, who reigned after the year 1109, is erroneous; but in the account of Subah *Málwa*†, it agrees with the appendix to the *Agni-purán'a.*

Musulman writers inform us, that after the death of GEBAL, or CHAIT-PA'LA, the *Bathara* kings, in *Gujjarát*, became lords paramount, or emperors of *India:* and, in the *Agni-purán'a*, we find that CHAITRA-PA'LA had two sons, MAHA'-CHANDRA-PA'LA, or MAHE'NDRA-PAL'A, who proved at last a weak and foolish prince, and his brother RAYA-S'E'NA carried away his wife, and built *Dílli.* He was called ANANGA-PA'LA, or befriended by love, and RATÍPA'LA, or fostered by RATÍ, the goddess of love, and the consort of CA'MA-DEVA; perhaps in allusion to the above transaction: hence the founder of *Dílli* is called by some, ANANGA-PA'LA, and by

* Vol. 2d. p. 115. † Vol. 2d. p. 62.

others RAYA-SENA. He is noticed by TIEFFENTHALER, who calls him RASENA, and says that he built *Dílli**. ABUL-FAZIL, in his account of Subah *Dilli*, places this event in the year of VICRAMÁDITYA 429: and in a former section, he makes the first year of that *era* to correspond with the first of the *Hejra* †. It happened then in the year of CHRIST 1050; and this is confirmed by another passage from the same author ‡, in which he places the building of *Dilli*, or the beginning of the *Tomára* dynasty, in that city, 142 years before the death of PITHAURÁ, in 1192; and this gives the same result.

After the defeat and death of PRÍTHWÍ-PÁLA, or JIDÁHANA, in the year 1110, his son VIGAHÁNA returned to *Gaud'a*, his native country, according to the *Agni-puránía*; but we find still three of his descendants, reigning at *Dílli*, SANCA-PÁLA, CIRTTIPÁLA and ANANGA-PÁLA. In the *Agnipuránía* it is said, that RAY-SENA conquered the *Antar-vedi*, or country between the *Jumná* and the *Ganges*; and also the country about *Dilli*, and settled there. The *Chauhánas* possessed at the same time, *Sambhala-deśa*, or the country of *Sambhala*, to the north of *Canouge*.

ANAGA-PÁLA, the last king of *Dílli* of the *Tomára* dynasty, being without male issue, adopted PRÍTHWÍ-RÁJA, or PITHAURÁ, the last of the *Chauhán* dynasty. This account is to be found in the history of the wars of PIRTHÍ-RÁJA, or PITHAURÁ, in the spoken dialects, part of which is in my pos-

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* Beschreibung von Hindustan, p. 111.
† Soobah Malwa, vol. 2d. p. 61. See above, p. 161, 162.
‡ Vol. 2. p. 115, 118.

session. There it is declared, that ANANGA-PA'LA had no male issue; and that he gave his only daughter in marriage to the CHAUHA'N king of *Sambhala-des'a;* who had by her a son, called PITHAURA'. ANANGA-PA'LA adopted him for his own son, and appointed him his successor to the throne of *Dílli*; recommending him, at the same time, to JAYA-CHANDRA, emperor of *India*, and residing at *Canouge*. This happened, says the author of the above treatise, in the 120th year of king ANANGA-PALA'; but more probably of his dynasty, which lasted 142 years; and accordingly, this adoption took place in the year 1170 of the *Christian era*.

It is acknowledged, that the imperial throne belonged of right, to the *Chohán* family, and that they were deprived of it by JAYA-CHANDRA, of the *Rattore* tribe; but we are not told the ground of their claims and pretensions. Be this as it may, such was the cause of the last great war in *India;* for, when JAYA-CHANDRA attempted to perform a grand sacrifice, at which the presence of all the kings of *India* was required, he was told, that he was not qualified to preside at such a sacrifice, as the empire belonged to the *Chohán* family; and of course, that it was the province of PITHAURA', who had absented himself, because he thought that the usurper would not allow him to preside at the sacrifice. A love affair contributed also to exasperate both parties; for, when JAYA-CHANDRA led an army into *Sinhála-dwípa*, or *Ceylon*, the king of that country submitted, and made him a present of a most beautiful and accomplished damsel: but JAYA-CHANDRA, being advanced in years, adopted her for his own daughter; and she was soon to have been married to a powerful king: but she, having heard of PITHAURA's valour and achievements, fell in love with

him, and refused her consent. JAYA-CHANDRA, enraged at her behaviour, caused her to be confined; and this was the cause of a most bloody war, in which the heroes of *India* fell, by mutual wounds. PITHAURA´ proved successful, set the young damsel at liberty, and carried her in triumph to *Dilli*, and recovered also the imperial throne. But he did not enjoy it long; for SAHEBUDDIN made his appearance with an army, and JAYA-CHANDRA, entered into a league with the invader, which soon brought ruin and destruction on both parties. PITHAURA´ fell in the plains of *St'hán'u-sar* or *Thán'u-sar*; and it is said, near a village, called *Naráyana pura*. The league, between JAYA-CHANDRA and SAHEBUDDIN, did not last long; and in an engagement, in the year 1194, between *Chandwár* and *Etáwáh*, JAYA-CHANDRA was completely routed, and obliged to fly; and, in attempting to cross the *Ganges*, in a small boat, he was drowned *.

After the famous expiation of CHANACYA, which I mentioned before, in my essay on the *Gangetic* provinces, the author of the appendix to the *Agni-purán'a* proceeds in the following manner. "AMBU-RA´JA, (or the king of the waters surrounding *India*), MAHA´-PATI (the great sovereign lord), BHUMÍ-PA´LA, (the fosterer of the world), reigned a hundred years. After him came RA´MA-CHANDRA, who reigned twelve years; and was succeeded by BHA´RATA, who reigned in *Ujjayiní*, 200 years."

AMBU-RA´JA is obviously CHANDRA-GUPTA, whose reign here is made to begin, and not improperly, immediately after the expiation of CHA´N´ACYA; when every thing was settled, and CHANDRA-GUPTA acknowledged paramount of *India*.

* Ayin Acberi, Vol. 2d. p. 102.

Thus, from that famous expiation, to the end of BHA'RATA's dynasty, there are 312 years, ending the year preceding the first of the *Christian era:* but according to the *Cumárícá-c'handa*, this expiation took place 310 years B. C. and the difference is trifling.

"Then," says the compiler of the appendix to the *Agní-puráńa*, "at *Pratisht'ána* in the *Deccan*, through the mercy of S'IVA, will appear 'SA'LIVA'HANA, *Mahá-bali*, great and mighty; *D'harmátmá*, the soul and spirit of righteousness and justice; *Satyaváca*, his word truth itself; *Anasúyaca*, free from spite and envy; *Rajyam-uttamam-crítaván*, whose empire will extend all over the world; *Nara-váhana*, the conveyer of souls (to places of eternal bliss): and he will reign 84 years."

Nara-váhana signifies literally the conveyer of men, which is here the same thing: for the idiom of the Sanscrit language will hardly admit of our saying conveyer of souls. Thus CHRIST is represented by the *Manicheans*, when they call him *animarum vector in majore navi*, the conveyer of souls in the larger boat.

"Then will come NARA-VA'HANA (in the *Bhavishya puráńa* NRI'-SINHA) who will reign 100 years." NARA-VA'HANA and NRI'-SINHA are two well known epithets of 'SA'LIVA'HANA, and they have been probably introduced here in order to enable the compiler to bring in 100 years to answer his purpose. What induces me to think so, is the passage immediately following. "Then will appear NARA-VA'HANA and VANSA'VALI." In the *Ayin-Acberi* *,

* Subah Málwah.

in the room of VA'NSAVALI, we read in one copy VANS'A-RA'JA, and in another PUTRA-RA'JA, and the former is retained by TIEFFENTHALER. VANS'A-RA'JA, signifies the royal offspring, PUTRA-RA'JA the royal children, and VAN'SA'VALI, offspring or descendants, and also an account of them. The two former are generally pronounced RAJA-PUTRA'S, and RA'JA-VANSA'S; and they are introduced here, because there are some families of RA'JA-PUTS, and RAJA-VANSAS, who really pretend to be 'SA'LAVANSAS, or the offspring of HA'LA or 'SA'LA-VAHANA. To these, very properly, no years are allotted in my copy of the *Agni-purán'a;* but, in that used by ABUL-FAZIL, 100 years are given to them; and none to 'SA'LIVAHA'NA, or if you will, one year only.

Thus in my copy we read,	
'SA'LIVA'HANA, - - - - - - - -	84
NARAVAHA'NA and the *Vansá-halis* or *Vansávális* - - - - - -	100
	184
But in the *Ayin Acberi* we have,	
'SA'LIVA'HANA - - - - - - - -	1—or—0
NARA-VA'HANA - - - - - - - -	100
Vansa-rájas or *Putra ràjas* - -	100
	200

Hence it appears, that originally 'SAL'IVA'HANA and NARA-VA'HANA, in this place, were considered but as one individual.

" Then will come 'ADITYA, who will reign 55 years." His reign began the 185th year of 'SAL'IVA'HANA, and of the *Christian era*, according to my copy; but in the year 201, according to the *Ayin Acberi.* This is the VICRAMA-'ADITYA, who was

contemporary with SAPOR king of *Persia*, according to FERISHTA, and reckoned among the several kings called VICRAMA'DITYA, in the *Sinhásana dwátrinshati*. He is mentioned under the name of 'SUDRACA, or 'SURACA in the *Vrihat-cathá*, and under that of VICRAMACESARI in the *Vetalapanchavinsati*, as we have seen before*; and according to the *Cumáricá-c'han'da*, began his reign in the year 191 of the *Christian era*. After him came BRAHMA'-RA'JA, who reigned 87 years in *Vidharbha-nagari*. His successor was ATI-BRAHMA', who reigned at *Ujjayinì*: he went with an army to countries toward the north, but was defeated and killed after a reign of 31 years."

"He was succeeded by SADA'S'WA," called VASUDHA in the *Bhavishya*, and BASDEO by FERISHTA: "he reigned 84 years."

In his time appeared HARSHA-ME'GHA or RASHABHA, called GANDHA-RUPA in the *Ayin Acberi*, and BAHRAM-GÓR in the history of *Persia*.

His son was VICAMA'DITYA, (in the *Bhavishya* two persons are mentioned, BHARTRIHARI and SRÍ-VICRAMA'DITYA;) who began his reign accordingly in the year 441, reckoning from the first of 'SA'LIVA'HANA, and answering of course to the same year, (441,) of the *Christian era*: and the son of BAHRAM-GÓR ascended the throne in that very year. 'SRÍ-VICRAMA'DITYA is supposed to have reigned 100 years, and of course he died in the year 541. It is here said that he went and subdued the *Paitánas*; that is to say, the inhabitants of *Pátána* in the *Deccan*, but not the *Patans*, as BERNOULLI

* Page 107, 146.

says. His successor was CHANDRA-S'EN'A, who reigned 50 years: then came SU'RYA-S'E'NA, who reigned 85, and died of course 135 years after VICRAM'ADITYA. S'URYA'-S'ENA seems to be a corruption for SU'RYA'NSA, or 'SRÍ-SU'RYA'NSA, another name for 'SRÍ-'SA'LIVA'HANA, as I shall shew in the next essay: and, like 'SA'LIVA'HANA's death, his is placed exactly in 135th year of VICRAMA'DITYA's *era*, and the same number of years after his death, and in the year 676 of the *Christian era*. But it does by no means follow, that there existed at that time a prince called either 'SA'LIVA'HANA or SU'RYA'NSA; but what we can reasonably conclude is, that his *era* was introduced at that time, and finally prevailed. "Then," says our author, (under the reign of his successor 'SACTÍ-SINHA, and in the room of VICRAMA'RCA, the *Saca-bandhi*,) "'SA'LAV'AHANA will be chief of the *'Saca*, or sacred period;" or, in other words, his *era* will prevail over that of VICRA'MARCA.

VICRAMARCA'T *param chaiva 'SACA carttá bhavishyati.*
'SA'LAVA'HANA *námnaiva prasidd'ham punar asya tu.*

Then, after VICRAMA'RCA, 'SA'LAVAHA'NA will be the maker (*ruler*) of the *S'aca*.

The famous BHÓJA was the son of RA'JA-SINDULA, and born unto him in his old age. When he died, his son being a minor, and only eight years old, his uncle MUNJA, whose name is often written PUNJA, was therefore intrusted with the regency.

MUNJA wrote a geographical description, either of the world, or of *India;* which still exists, under the name of *Munja-prati-desá-vyavasthá*, or state of various countries. This voluminous work was afterwards

corrected and improved, by RA'JA-BHÓJA; and this new edition is called *Bhója-pratides'a-vyavástha*, and still exists in *Gujjarát*.

When BHÓJA ascended the throne, he found the famous *Sinhásana*, or lion-seat, which had been buried since the days of VICRAMA'DITYA, and thereby became entitled to that epithet, which was confirmed to him by BALI, when he visited the infernal regions. He is also called 'SRÍ-CARN'A-RA'JA-VICRAMA, with the title of ADITYA, which last is used often separately, and was also a title bestowed upon 'SRÍ-CARNA-DE'VA, whom he alluded to in the stanzas he sent to MUNJA *, and which afterward, from that circumstance, was bestowed on him. When he died, the goddess SARASVATÍ, presiding over the sciences, wept bitterly, saying "where shall I find now a place to dwell in." BHÓJA ascended the throne, as we have seen before, in the year of CHRIST 913; and he resided at *Dhárâ-nagar*, commonly called *Dhár*, in the province of *Málava*. He had an only daughter, called BANUMATI, whom he gave in marriage to JAYA-NANDA, who conquered all *India*, and is reckoned as the last of the worthies dignified with the title of VICRAMA'DITYA, though some reckon JAYA-CHANDRA as the last; and indeed JAYA-NANDA and JAYA-CHANDRA are often mistaken the one for the other.

In the appendix to the *Agni-purán'a*, the author concludes with declaring that some hundred years ago, "the gods and men in *India*, groaning under the tyranny of foreign tribes, went in a body, with BRAHMA' at their head, to *'Swèta-dwìpa*, or the White Island in the west, to implore VISHNU's protection, in their own name, and also in the behalf

* Page 146.

of men. VISHNU comforted them, as usual, and promised that he would appear in the character of CALCI-AVATA'RA, when he would exterminate all their enemies." If so, the Hindus must wait no less than 429, 917 years for relief. Every VICRAMA'DITYA had a certain number of learned men at his court; the chief of whom is, in general, called CA'LÍDASA. According to the supposed appendix to the *Bhavishya-puráńa*, VICRAMA'DITYA the son of GARDABHA had sixteen of them. RA'JA-BHÓJA had nine, among whom DHANWANTARI and BARARUCHI were the most famous. These two learned men are called DHUNPA'L and BERUJE in the *Ayin-Acberi*. Another VICRAMA'DITYA had only five; and these learned men were dignified with the title of *Ratna*, or jewels, with which the courts of those emperors were adorned. It is the general opinion, in the west, that the real CA'LIDASA lived at the court of king BHÓJA. This is confirmed by the extracts communicated to the society, by MAJOR MACKENZIE, and also in the 8th vol. of the Asiatic Researches*; and 'SA'LIVA'HANA is even supposed to have had a poet of that name at his court.

The next list, coming under examination, is from *Gujjarát*, and was given to me by a *Pandit*, a native of that country. It is entirely confined to the ancient rulers of that time, and of the adjacent countries; and comes down no lower than the year 1309; and I was happy to find, that it was the same list which was used by the *Pandits* who assisted ABUL-FAZIL. This shews that it existed above two hundred years ago; and such as it is, that they had no better documents at that time. They borrowed from it only the last dynasty of the king of *Gujjarát*, which began A. D. 746.

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* Page 243.

This list, called also *Vansávali*, contains the names of the rulers of these countries, under the title, either of *Bala-rájás*, or *Ráyas*, or *Mahá-Rájás*, sprung from various tribes, or belonging to different dynasties. Many of them were only petty kings, and vassals to the more fortunate kings of another tribe, sitting then upon the imperial throne. For these various tribes were always struggling for supreme power; and the imperial dignity was constantly shifting from the one to the other. Unfortunately, the compiler has not pointed out those who were *Rájéndras;* and there were, of course, many of these inferior sovereigns, in a collateral succession with the emperors. The whole is compiled with the usual negligence and carelessness of the Hindus, and the author carries the beginning of this list as far back as the beginning of the *Cali-yuga*, and yet he mentions only thirty-six kings, or rather nine and twenty, in the list, from that period to the year of CHRIST 746. It is customary with Hindu genealogists to re-ascend to the beginning of the *Cali-yuga*, whenever they fancy they can do it with propriety; otherwise, these families would be looked upon as a new race, and their princes as men of yesterday. But these nine and twenty reigns cannot carry the origin of the *Bala-Ráyás* beyond the beginning of the *Christian era.* This idea, however, is by no means novel; for, among Musulman writers, some make DABSHELIM the first *Bala-Ráyá*, contemporary with HUSHENK, the second king of the *Pishdadian* dynasty in *Persia;* but, according to MASOUDI, he must have lived a little after the beginning of the *Christian era.*

The title of *Bala-Rája*, *Bala-Ráyá*, or *Bala-Rau* in the spoken dialects, signifies the great king, and is unknown in *India*, as belonging to the ancient sovereigns of *Gujjarát*. According to our compiler, there were two sorts of these sovereigns, some were

Rájá-Culas, or of royal extraction, such as VICRAMA'DITYA and BHÓJA; others were descended from powerful *Zemíndars* of different tribes, the names of which were the *Cha-uhána* or *Chauhána*, *Chaùdá* and *Gohelá*, to which we may add, from the context of the list, the *Solanci*, and the *Bághelá* tribes. According to Musulman writers, the first *Bala-Ráyá* was DAB-'SELIM, DAB-'SLIM, DI-'SALEM and DI-'SLAM. These are strange appellations, and unknown in *India*, at least in that shape; and are hardly reducible to any standard, either *Sanscrit* or *Hindí*. My inquiries, concerning this ancient and famous king, have proved unsuccessful, unless his real name were 'SAILA-DE'VA, according to learned men from *Gujjarát*. This 'SAILA-DEVA, 'SAILA-DEO, DEB-'SAILA or DE-'SAILA, was, according to tradition, a most holy man, of royal extraction; and I find him, or one of the same family, mentioned in the *Ayin-Acberi*, under the name of SYEL-DEO*. The word DEVA is pronounced DEB in the eastern parts of *India*, DEO, DE' and DÍ in the western parts of *India*; and, in the present list, such proper names as end in DE'VA, or DEO, in the *Ayin-Acberi*, have constantly DE' in the room of it. This word is seldom prefixed to proper names, yet there are several instances of it, as in DEB-PA'L-DEB, a famous emperor, mentioned in the imperial grant found at *Monghír*, and in DE'VA-NAUSHA, pronounced DI-NISSI in the *Deccan*. In our list, the first *Bala-Ráyá* is called DI-'SACA, or DE'VA-'SACA, which I suppose to be meant for DI-'SA'LA, DI-'SAILA or SAIL DEO.

His descendants are known to Musulman writers under the appellation of *Deb-Sálimát*, according to D'HERBELOT†; and their sire is represented as a

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* Ayin-Acberi, Vol. 2d. subah Gujjerát, p. 89.

† See D'Herbelot, Dabschelim and Dabschalimat.

most virtuous and powerful prince, and king of the country of *Sóma-nátha*, or *Gujarát*. PILPAI was his prime minister, and at his command, wrote the famous testament of HUSHENK, still existing in *Persian*. In the present list, DI-'SACA or DE'VA-'SACA is declared to have been a *Yadu* by birth, and of this tribe was CRĬSHNA. MASOUDI, who wrote about the year 947, and had been in *India*, throws some light, in his golden meadows, upon the time in which DE'VA-'SAILA lived.

"The dynasty of PHOUR, who was overcome by ALEXANDER, lasted 140 years: then came that of DABSCHELIM, which lasted 120 years. That of YALITH was next, and lasted 80 years; some say 130." (YALITH is a strange name, and the nearest proper name to it in *Hindí*, is JA'LÍYA', or YA'LÍYA', the name of a descendant, or successor, of DE'VA-S'AILA.) "The next dynasty was that of COUROS," (a corruption, from either CARN'A, CURA'N or CURU:) "it lasted 120 years."

"Then the Indians divided, and formed several kingdoms; there was a king in the country of *Sind*; one at *Canoge*; another in *Cashmir*; and a fourth in the city of *Mankir*, called also the Great *Houza*; and the prince, who reigned there, had the title of *Balhara**."

Now, it is acknowledged, that DEB-'SALIM was the first *Balhara* emperor, and the founder of that dynasty; and if so, that emperor and his dynasty, have been transposed by MASOUDI, and erroneously placed before COUROS, whoever he was. The other

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* See accounts and extracts of the MSS. in the library of the king of France, vol. 1st, p. 124.

dynasties of PURU, YA'LÍYA' and CURU, lasted according to him, either 390 or 350 years. We cannot fix, with precision, the begining of the dynasty of PURU; but at all events, the division of *India* into four empires, happened in the first century after CHRIST; and according to ARRIAN, in his *Periplus*, the city of *Minnagara* or *Mankir*, was the metropolis of that part of the country. The city is placed, by PTOLEMY, upon the banks of the *Narmadá*, and is now called *Manhawer*. I have not yet been able to procure much information about this famous place, as very few people from that part of *India* ever come to *Benares:* but it is mentioned in the *Ayin-Acberi*, as a town of some note in the district of *Mandow*, in the province of *Malwah*.

The dynasty of DE'VA-SAILIM, in *Manhawer*, according to MASOUDI, lasted 120 years; that is to say, his descendants were, during that period, lords paramount of *India*, or at least of that part of it; and in the time of PTOLEMY, the metropolis of that country was no longer *Manhawer*, but the seat of empire had been transferred to *Ujjayiní* or *Ozene;* and he wrote in the beginning of the third century. In his time, the *Bala-Rayás* were no longer lords paramount of *India;* but were either vassal, or independent kings, residing in some fastnesses among the mountains, at a place called by him *Hippocura;* and now *Pay-gurra* or *Pawá-gurra*. This was, says he, the place of abode of the *Baler-curos;* or rather the *gur*, *curos*, fort or abode, of the *Balher* kings. According to the appendix to the *Ágni-puráńa*, the supposed dynasty of 'SA'LIVA'HANA lasted 184; but according to the *Ayin-Acberi*, 200 years. After it, came A'DITYA, of the *Pomára* tribe, called also VICRAMA'DITYA, 'SUDRACA and 'SURACA: he was *Visvapati*, that is lord paramount of the world, or rather of that part of *India*. According to the

Cumárica-c'hand'a, he ascended the imperial throne in the year of the *Cali-yuga* 3191, and of CHRIST 191. The appendix to the *Agni-purán'a* places his accession in the year 185, and the *Ayin-Acberi* in the year 201 of our *era*, and he reigned at *Ujjayinî*. By PTOLEMY, the king of that famous city, is called TIASTAN; a strange name, and not reconcileable to the idiom, either of the Sanscrit, or Hindi languages. I strongly suspect however, that it is a corruption of *Adityasthán*, which may have been misunderstood, by travellers, who knew very little of the country languages. I suppose that either these travellers, or PTOLEMY, who conversed with many Hindus at *Alexandria*, asked what were the names of the metropolis of that country, and of its king. The answer was *Ujjayinî-Rája-Aditya sthán*; 'Ujjayinî is the *residence* of king 'ADITYA:' which was erroneously rendered '*Ojené* is the metropolis of king TYASTHA'N,' or TIASTHAN. In the same manner he has disfigured the name of the *Balher* kings, saying that *Hippocuros* was the place of residence of king BALER-CUROS, which is obviously a corruption for *Balher-ghur*, the fort or place of abode of king BALHER. Thus STRABO, in speaking of the country of *Tej*, in *Cach'ha* calls it the kingdom of TESSARIOSTUS, thereby implying, that this was the name of the king; whilst *Téssariostus* is a corruption from *Tejaráshtr*, or *Teja-rasht*, which signifies the kingdom of TEJA, an ancient king, who built the town of *Teja*, to the eastward of the *Indus*. As king DE'B-'SAILA, or DE'-'SAILA, is called, in our list, DI-'SACA, or DEVA-'SACA, which is also one of the titles of 'SA'LIVA'HANA; this would induce an opinion, that DAB-SHELIM, or DI-SALIM, is the same with 'SALIVA'HANA. But such is the confusion and uncertainty of Hindu records, that one is really afraid of forming any opinion whatever.

As it is said, that it was by his order, that the

famous treatise, called *Jávidan-khird*, or eternal wisdom, called also the will or testament of HUSHENK, had been written; he has been probably, from that circumstance, made contemporary with that ancient prince, who began his reign 700 years after the accession of CAI-UMURSH, to the throne of *Persía*. CAI-UMURSH, according to MASOUDI, was the son of ARAM, the son of SHEM, who died 502 years after the flood.

MASOUDI says, that *Manhawer* was also called the great *Houza*, which, translated into Hindí, is *Burra-Houza*, or *Burra-Gouza*, and has such affinity with *Bary-Gaza*, or in Sanscrit *Bhrĭgu-Cach'há* or *Bhrĭgu'Cula*, *Bhrigu's* shore or beach, that I strongly suspect, that MASOUDI mistook *Baroach* for *Manhawer*; and that the blunder originated from a want of knowledge of the Hindì language: *Manhawer* is also called *Mahoura*, by other Musulman writers.

Our compiler says, that there were, in all, 36 kings, from DE'VA-SACA, to the year 802 of VICRAMA'DITYA, answering to A. D. 746; but we can make out only 29 from the list; for the five *Pramàras* must be rejected, as they do not belong to *India*. They are called in this list, *Ch'hárui-vi-hahá*, which is an expression partly Sanscrit and partly Hindi, as usual in these lists. It signifies the four great destroyers, and is an allusion to the famous *Chár-yári* of the Musulmans; and which as I observed before, is made with a little straining, to signify, in Sanscrit and Hindi, the four destroyers, instead of the four friends and associates. Several of their names imply the abhorrence, in which the Hindus hold them; for one is called SAVALA', CERBERUS or the infernal dog: another, PRAMA'RA or PARIMA'RA, is here meant for MUHAMMED, and signifies YAMA or PLUTO, the infernal and universal destroyer. CU'T'APAL'A, he who was fostered by MA'YA',

or worldly illusion, otherwise the impostor, and perhaps intended for MOAVYEH. MUHAMMED was originally introduced into this and other lists, because it was to the Hindus an ever memorable, though most unfortunate epoch, and from which their conquerors dated their sacred *era*. It is not to be supposed, that he was thus introduced into those lists, from an idea that he ever was emperor of *India*. This was well understood at first; but the case is very different now, Such is the opinion of those who reject the legendary tales about SA'LIVA'HANA and VICRAMA'DITYA; and this is by no means a new idea, for it is noticed in the *Râja-Taranginí*, which is a work highly esteemed in *India*, and of some antiquity: for it was presented to the emperor ACBAR, in his first visit to *Cashmír*, by learned *Pandits*, who considered it as containing the most authentic documents of the history of their country.

About the time of MUHAMMED, the descendants of DE'VA-SAILIM, who for a long time had lost their rank of *Visva-páti*, lords of the world, *Rájendra*, lords of kings, *Rájá-rájás*, kings of kings; began to lose also their influence and power, even as vassal kings, and they even finally lost their patrimonial territories and kingdom, which was usurped by the *Solanci* tribe. It seems that they retired into the province of *Málwa*, in the vicinity of *Ujjayiní*, where they lived in retirement, and entirely given up to devout contemplation, still very much esteemed and respected. There, at *Ujjayiní*, we find one of them called SAILA-DE'VA; who found, in the wilderness, young VANA-RA'JA, and sent him to *Rádhanpur* to be brought up; and this happened in the year 696; for VANA-RA'JA, when fifty years of age, built the town of *Narwálch* A. D. 746*. In the

* *Ayin-Acberi*, Vol. 2d. p. 89. 90.

year 1025, we find another of them, living also in obscurity, and equally called DE'VA-SAILA, or DABSHELIM; and who was raised to the throne of his ancestors, by SULTAN MAHMUD. The list of the *Bála-Ráyás*, from VANA-RA'JA to RA'JA CARNA', was originally the same with that to be found in the *Ayin-Acberi*, excepting some variations; for it is hardly possible to find two lists in *India* exactly alike. The number of kings, in both, is twenty-three; and the aggregate sum of their reigns agree within two years. But the arrangement is somewhat different, and the years of each respective reign by no means correspond. Some kings are transposed, and the names of a few quite disagree; and each list supplies also deficiencies, which occur in others. Owing to the uncertainty of Persian orthography, several names are strangely disfigured, both in the English and German translations; which last is by no means to be neglected, as there are particulars in it, not to be found, either in the manuscript list, or in the English translation of the *Ayin-Acberi*. Thus, for instance, RA'JA'-A'DITYA is called RESHA'DUT in the English translation, and RA-SCHADAT by TIEFFENTHALER. VANA-RA'JA is called BANSRA'JE by the former, and BIRJ by the latter. The summary history of the Hindu princes of *Gujarát'*, in the *Ayin-Acberi*, contains many interesting particulars, not to be found in our list. VANA-RA'JA, according to our list, was of the *Chaud'á* tribe, still extant in *Gujrát'*. ABUL-FAZIL says, that his father was called SAMANTA-SINHA; and the word *Samanta* implies, that he was a petty king, probably in *Gujrát';* but being of a base and turbulent disposition, he was put to death, by order of 'SRÍ-BHUADA'-DE'VA, emperor of *Canoge;* and his family was plundered, as usual. His wife fled into the forests, or *Vana*, where she was delivered of a son, called, from that circumstance, VANA-RA'JA.

A holy man, called SAILA-DEVA, DEVA-SAILA or DEB-SAILIM, happening to pass by, on his return, from *Ujjayiní*, to *Rádhana-pura*, in the northern parts of *Gujrát'*, took compassion on the woman, and gave the child in charge of one of his disciples, who carried him to *Rádhana-pura*, where he was brought up. He afterwards associated with a band of robbers; and at last seized the royal treasure, which was going to *Canoge*. He then made himself independent, and built the city of *Narwáreh* or *Narwáleh*; and his friend CHAMPA, a market man, says ABUL-FAZIL, and of the *Bhil* cast, (a very low tribe, according to learned *Pandits* from *Gujrát'*,) built the town of *Champa-nagara* or *Champa-nere*.

The next king, noticed by ABUL-FAZIL, is another SAMANT-SINHA; but this could not be his name, for *Samant*, as before observed, implies a petty king in Sanscrit, and vassal princes are thus denominated. Thus we read, that PRĬTHWÍ-RA'YA' had with him one hundred *Samantas** or petty princes, commanding their own quota of troops. His name was probably BHÚAD'A-DEVA, the immediate predecessor of MULA-RA'JA in our list, but the fourth only in the *Ayin-Acberi*. He gave his daughter to 'SRÍ-DHUNDHACA of the *Solancí* tribe, after whom the town of *Dhundhaca*, in *Gujrát'*, is denominated.

King JAMUND, in the *Ayin-Acberi*, is omitted in our list, probably because it is a corruption from *Samanta*, and a title belonging to MULA-RA'JA. In his time, SULTAN MAHMUD GHAZNEVI conquered *Gujrát'*; and, in the year 1025, replaced, upon the

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* Ayin-Acberi, vol. 2d, p. 118.

throne of his ancestors, DEB-SAILIM, a descendant of the famous king of that name, who led a retired life, entirely given up to devout contemplation. He is called VALLABHA in our list, BEYSER and BIPLA in various copies of the *Ayin-Acberi**. Being a weak man, and blind, he reigned only six months, and was succeeded by the two sons of his brother, DURLABHA and BHÍMA'-RA'JA'.

Then appeared the famous VISALA-DE'VA, with the title of CARN'A-RAJE'NDRA, that is to say, powerful and magnificent like CARN'A, and lord paramount over many kings. He is said, in our list, to be a *Chait'urá*, that is, of the *Chit'ura* tribe, still extant in *Gujrát'* †; and after which the famous place of *Chait'ur* or *Chait'or* is denominated. He was therefore a native of *Mewár*, now called the Sircar or province of *Chaitór*. This induces me to believe, that he is the same with VÍSALA-DEVA, mentioned in the inscription upon the pillar of FIROZE, at the hunting seat of the emperors near *Dílli*, and called *Stambhacamandíra* in the appendix to the *Agni-puráńa*; that is to say, the palace with the pillar. There he is said to be king of *Sacambharí*, which is probably the town of *Cambher* or *Cambhernere*, in the province of *Mewár*. At all events, it was certainly in that country, as I shall shew hereafter. His father VE'LLA-DE'VA was originally a petty king of that country, and his son VISALA-DEVA caused that pillar to be erected, in the year 1164, and thus the times coincide. VISALA probably availed himself of the indolence and supineness of the princes of *Ghazni*, and drove the *Mlech'*-

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* *Ayin-Acberi*, Vol. 2d. p. 91, 95.

† See *Ayin-Acberi*, Vol 2d. p. 84. The true name is, I am told, *Chittrore*.

has, or Musulmans, out of *Aryávarta*, or the land of virtue, thus making it, once more, what it signifies according to the inscription. *Aryávarta* includes all the north of *India*, from the snowy mountains, down to the *Vindhyan* hills. He destroyed all the princes who refused to submit, and kindly treated all those who did; and having visited all the places of worship, through his extensive domains, he retired to *Sácambhari*, to end his days in peace and rest, exhorting all the kings of *India* not to slumber, but to go on with his plans, and follow his measures. He is mentioned also in the *Sárngad'hara-paddhati*, written by SA'RNGAD'HARA, grandson of RAGHU-DE'VA, spiritual guide of HA'MMÍRA, king of *Mewár*, or *Sácambhari-désa*, nearly in the same words with the inscription, which was written in the year of VICRAMA'DITYA 1220, answering either to 1164 or 1154 of CHRIST; for in that country they reckoned the *era* of VICRAMA'DITYA ten years earlier than in the eastern parts of *India*. He was succeeded by JAYA-SINHA, called also SIDDHA-RA'JA, SIDDHA-RA'JE'S'A, and in the dialect of *Gujarát*, SIDDHA-RA'JE'S'AGA-DE' for DE'VA. It seems that VIS'ALA-DE'VA left no male issue; for no children of his are recorded in the above inscription, which would not probably have been the case had he left any. Who this JAYA-SINHA was, is unknown; but it seems that CUNHWAR-PA'LA, a near relation of his, was the lawful heir; at least ABUL-FAZIL says, that the latter, from the dread of losing his life, lived in obscurity, during JAYA-SINHA's reign; after whose death he ascended the throne, but was poisoned by AJA-PA'LA, the son of JAYA-SINHA.

The next is LUC-MULA-RA'YA, mentioned in the *Ayin-Acberi*, but omitted in our list, unless he be the same with BA'LU-MULA, or BA'LUCA-MULA, called BIRDMOOL in the English, and HARDOHN in the

German translation. They are probably the same individual; for what is asserted of LUCKMUL in the *Ayin-Acberi*, is affirmed of his supposed successor in our list; namely, that after his death the nobles elected a prince of the *Bhágéla* tribe, called BIRD-MOOL in the *Ayin-Acberi* *, and BHALA-BHÍMA-DEVA in our list: the latter's name is split into two, and two princes made of them in the *Ayin-Acberi*, under the names of BEIL-DEO and BHIM-DEO †. Be this as it may, LACMUL-RAYA, whose real name was LAC'HAN'-MULA-RA'YA, or simply LAC'HAN'-RAYA, from the Sanscrit LACSHAN'A-RA'YA, is well known to Eastern writers, under the name of LAGHAM-RA'YA' ‡. He was born of obscure parents, and raised himself by his own merit, and ultimately became emperor, or *Bala-ráyá*. He governed with justice and equity: but after a long and prosperous reign, and when he was above eighty years of age, he was disturbed in his possessions by MAHMU'D-BACTYAR GHILJI general of SULTAN MAHMU'D, who began his reign in the year 1205, and died in 1209. In the years 1207 and 1208, that general was in *Bengal;* and, therefore, he must have invaded *Gujrát* in the year 1209; but the death of the emperor probably prevented his completing the conquest of that country. For though the authors cited by D'HERBELOT say that he effected the reduction of the country, yet ABUL-FAZIL says, that it was a mere incursion §.

The reigns of SIDDHA-RA'JES'A, of his cousin CUNHWAR-PA'LA, and of AJA-PA'LA, son of the former, are obviously too long; for they amount to

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* Vol. 2, p. 91, 95. † *Ayin-Acberi*, Vol. 2d. p. 95.
‡ See D'HERBELOT v. LAGHAM-RA'YA'.
§ *Ayin Acberi*, Vol. 2d. p. 92.

73 years in the *Ayin-Acberi*, and to 113 in my list, which is hardly possible; and it is not unlikely that LAC'HAN'-RA'YA was the prince, minister of VIS'ALA-DE'VA, mentioned in the inscription; for he was above 80 years old at the time of the invasion of *Gujrát'*, by MAHMU'D BACTYAR. There is such a disagreement in the lengths of the respective reigns of each king, in the various copies, that no certain inference can be drawn from them; and I noticed before a few transpositions: we must therefore remain satisfied with the grand outlines. VIS'ALA-DE'VA was not a native of *Gujrát'*; and though a *Bala-ráyá*, or lord paramount, he was not king of that country, but of the *Méwar*, or *Sácambhari*; and, of course, his supremacy did not in the least interfere with the order of succession of the kings of *Gujrát'*. He belonged to no dynasty, and reigned, as well as his prime minister, collaterally with SIDDHA-RA'JA and his relatives; and after the extinction of that family, LAC'HAN'-RA'YA was not only *Bala-ráyá*, but became also king of *Gujrát'*, and resided in the metropolis of that country, both as an emperor and as a king, during a space of twenty, or according to some, only eight years.

The last *Bala-ráyá* was CARN'A the *Gohilá*, who fled into the *Deccan*, when SULTAN-ALLA'-UDDÍN conquered *Gujrát'*. This happened, according to our list, in the year of VICRAMA'DITYA 1365, or A. D. 1309.

At that time, the famous RATNA-SINHA was king of the mountainous country of *Méwar*, and resided at *Chaitór*. He was descended from KHOSRU-PERVIZ, called also NUSHIRVA'N; and his amours with the beautiful PADMA'VATÍ or PEDMA'NÍ, are the subject of a poem, both in *Hindí* and *Persian*. Her beauty was the innocent cause of a bloody war, be-

tween the *Rája* and SULTAN-ALLA'-UDDÍN, which ended in the destruction of her lord, and his son-in-law RAWUL-ARSI, a *Chauhán*. HA'MMÍRA, the son of the latter, fled from *Chaitor*, sheltered himself among the more mountainous parts of *Mewár*, and maintained his independence as king of that country, and made *Sácambharí* the metropolis of his little kingdom. *Mewár* is divided into three parts, *Chaitór**, *Cambher* (or *Cambher-nere* for *Cambher-nagara)* and *Mand'ala* (or *Mand'alica)* built by king MANDA'LICA of the *Bhíl* tribe, and who lived about the year 796†. *Cambher* is probably the same with *Sacambhari*, which was certainly situated in *Mewár*.

SULTAN MUHAMMED K'HUNI, or the murderer, gave the government of *Chaitor*, and *Mewár*, to MA'LA-DE'VA, a *Chauhán*, and king of *Jalór:* but the latter was unable to reduce HAMMÍRA, though he had defeated him, in a bloody engagement, near the sea shore, according to the appendix to the *Agni-purána*. He then made peace with him, and gave him his daughter in marriage‡; but, after his death, HAMMÍRA murdered all his sons, and usurped the kingdom. This happened, according to the appendix to the *Agni-puráńa*, in the year of VICRAMA'DITYA 1490, which is impossible; and we must read 1390, or A. D. 1334; for SULTAN MUHAMMED began his reign in 1325, and died in 1351. In that appendix it is declared, that the base murderer was at last defeated and slain, by the joint forces of SECUNDER, governor of *Gáyá*, JALA'LA, governor of *Dílli*, and a body of *Yavanas* (Turcomans or Mogols) commanded by ULUC'HA'GA', perhaps for ULUGHKHA'N, a title of honor sometimes

* Ayin-Acberi, Vol. 2. p. 97. † Ibid. p. 98. ‡ Ibid p. 101.

bestowed upon noblemen, by the emperors of *India*. In the English translation of the *Ayin-Acberi*, HA'MMÍRA is erroneously called JEMEER. The dynasty of the princes of *Málwah* was a collateral one with those of the *Bala Ráyás*, though it be placed between NRÍPATI and VANA-RA'JA in our list. Such mistakes are not unfrequent among Hindu Chronologers: but as VANA-RA'JA's dynasty began in the year 746, and that of *Malwah* began in the year 191, and ended about the year 977, it is obvious that they were collateral, and I have arranged them accordingly. In the dynasty of the princes of *Málava*, GARDABHA' and his son VICRAMA'DITYA reappear; and, in the room of S'ÚRYA-S'ENA, or S'RÍ-SÚRYA'N'SA, we have S'A'LIVA'HANA; which confirms my former conjecture, that they were but one and the same individual.

My Pandit observes, that many of the names of the princes, who reigned before VANA-RA'JA, are not proper names of individuals; but belong, either to tribes, or ancient families, from which they sprang, or to small districts, or towns, their patrimonial estates, and with which he is well acquainted; and many of these names are in the plural form. Thus, JA'LÍYA', the name of a king, implies only that he was a JA'LÍYA', or of the *Jalim* tribe, which is settled on the banks of the *Mahí*.

Musulman writers say, that the metropolis of those *Baler* kings was equally called *Balhar*, as well as the mountains among which it is situated*. It was in a country belonging to the *Chauhán* tribe, the chief of which generally resides at *Alimohan*†: and it became the metropolis, when that tribe

* See D'HERBELOT's Bibl. Orient. v. BALHAR.

† This is also confirmed by ABUL-FAZIL. See *Ayin-Acberi*, Vol. 2d. p. 87.

usurped the rank and power of *Bala-Ráyás*. It is declared in our list, that the *Chauháns* were, at some period, rulers of the whole country, as *Bala-Ráyás;* but our author has forgot to point out, in the list, the princes of that famous and ancient tribe.

In the fifth century, *Tamra-nagara*, or *Cambát*, was the metropolis of the *Bala-ráyás;* and perhaps of the emperors of the west also, when these two dignities happened to be united in the same person; and it was the place of residence of the father-in-law of GARDABHA, or BAHRAM-GÚR, called SADA'S'VA, SADAS'VA-PA'LA, VESUDHA and TA'MRASEN'A, from his metropolis, *Tamra-nagara*, or *Tamra-pura*, signifying the Copper city, which is supposed, accordingly, to have been intirely built of that metal. It was near *Cambát;* but tradition says that it was swallowed up by the sea; and *Cambát* was a famous place of worship, called, in the *Puránas*, *Stambhast'ha-T'irt'ha** from a *Stambha* or column, close to the sacred pool. Now, a column is called *Camba* in the spoken dialects; and from *Cambasta*, is derived its present name of *Cámbát*. *Stambhast'ha* and *Tamrapura* are called *Asta* and *Traperá*, by the author of the *Periplus;* but PTOLEMY, considering these two places as one only, for they were close to each other, calls it *Astacampra* or *Astacapra;* and instead of *Támra*, which signifies copper, he writes *Campra* or *Capra*. The reason why he has carried this place so far inland, on the banks of the *Mahí*, is, that either he, or some other writer, misunderstood the natives, who have no word for a bay or gulf, and use generally the word river instead of it, particularly when there is one at the bottom of the gulf, as in the present case†.

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* Cumáricá C'handa. † *Cola* signifies only a Creek.

Osorio, a Portugueze writer, says, that when Francis D'Almeida landed, near *Cambát*, in the year 1519, he saw the ruins of sumptuous buildings and temples, the remains of an ancient city, the history of which was connected with that of a foreign prince. My Pandit informs me, that such ruins exist to this day, not close to *Cambát*, but at a place called *Cavi* or *Cavi-gauw*, to the south of *Cambát*, on the *Baroach* side, and a little to the southward of a place called *Cáná*, and in the maps *Canwa*. There are temples and other buildings, with statues half buried in the sands, with which this place was overwhelmed. Its Sanscrit name is *Capila-gram*, from which is derived its present one.

The promontory of *Asta-Campron*, mentioned in the *Periplus*, at the entrance of the gulf, appears to me to be *Groapnaught point*. It was thus called, because it was on the side of *Stambha*, and *Támra*, or *Cambát*. Another name for it was *Pápicá*, from a place of that name in its vicinity. As it is the same place called *Pakidaré* by Ptolemy, the true reading will stand thus, *Bhaucá-derá*, *Bhauki-derá*, *Bhaui*, or *Bhávicá-derá*, that is to say, the house or dwelling place of Bhau or Bhaui, an ancient hero of that country, who built the town of *Bhau-nagara*, or *Bhavi-gauw*, and probably the same with *Bhau-ki dera*. Beyond this cape, according to the *Periplus*, there is another place, toward the north, much exposed to the waves; and at the entrance of it, *that is to say, of the channel leading to it*, is an island called *Baiones*. This island is that of *Berum*, at the entrance of the channel, leading among shoals to the dwelling place of *Bhaui*, or *Bhau-nagara*, on the river *Bhaui*, and near the point of the same name. There is also a sand thus called; and the island of *Baiones* probably claims the same etymological origin; and perhaps, instead of *Baiones* in the original, we should read *Baio-nésos*, or the island of *Bhau* or *Bhaui*.

This place, says our author, is difficult of access, on account of the rapid tides, and because the cables are liable to be cut, by sharp rocks at the bottom of the sea. This island was once the seat of government, according to ABUL-FAZIL, who calls it *Birum* *. Opposite to *Bhávi-gauw*, says the author of the *Periplus*, and on the right side of the gulf, in the narrowest part of it, there is a reach, where the land near the sea appears much broken, and consists entirely of clay. It is called *Heroné*, and there is a place called *Cammoni* or *Camané*. This reach is the sea coast between the *Narmadá* and the *Jambusser* river. My Pandit observes, that the country between these two rivers, and along the sea coast, is called to this day *Canum*; but he does not know of any particular place so called. There is not a single stone to be seen; and the country is flat, the sea shore much indented, and there are very few trees: but it is probable that it was otherwise formerly; and *Heroné* is perhaps from the Sanscrit *Aranya*, which signifies a thick, but not impervious forest.

PTOLEMY has confounded the points of *Swalley*, *Diu* and *Jiggat* into one, which he calls *Balaion*, probably meant for *Diu-head*, a name given to it by Europeans, but unknown to the natives; and the nearest place of note to it is *Weylanoo* in MAJOR RENNELL'S map, from which *Balaion* or *Valaion* seems to be a corruption. The island called by him *Baraké* is *Dwáracá*, as obvious from its relative position; and *Baraké* may be only a mistake for *Dwáracá*. Besides, these two denominations are synonymous, or nearly so, and imply a door or gate-way. *Dwára* is properly the opening, and *Bhár* is the *bar*, or *barriere*, or the leaves of the door, with which the opening is kept barred or shut; and it is used,

* Ayin-Acberi. Vol. 2d. p. 83.

though improperly, for the door itself. It is used in that sense only in the west of *India;* yet the verb derived from it, *barna,* in the infinitive, and *bar* in the imperative mood, is used all over *India,* except in the peninsula. TWASHT'A', the chief engineer of the gods, having built a palace there, for RAN'ACHURJÍ or CRĬSHNA, (that is he who fled from the field of battle,) and TRICUMJÍ his brother, placed many of the doors the wrong way; and those that were properly situated were barred or shut up. When finished, every body crowded to see it; but were astonished to find the doors either placed wrong or barred; and great was the confusion and the uproar, some calling out *Dwára-c'hánh?* where is the door? and others bawling out *Bhárco-col,* open the door; hence the place was ever since denominated *Dwáracá;* and this ridiculous etymology is countenanced in the *Purán'as.*

The geography of PTOLEMY, in this part of *India,* is distorted to an astonishing degree; for besides a few mistakes, which I have mentioned, he supposes the river *Mahí* to form an elbow, and to run close to the *Narmadá,* with which it is made to communicate, through a short canal; and then afterwards to fall into the gulf of *Cántha,* or *Cach'ha.* We were guilty of as gross an error, two centuries ago; for we made the *Indus* to fall into the gulf of *Cambát.* The *Mahí* is a celebrated river, and the daughter of the earth *(Mahi,)* and of the sweat *(ushna,)* that ran copiously from the body of INDRADYUMNA, king of *Ujjayiní,* and famous in the legends relating to the white island in the west. The place where this happened, in consequence of a most fervent *tapasya,* was called *Ushnmahí* and *Ushmahí,* and is probably the *Axuamis* or *Auxomais* mentioned by PTOLEMY. The author of the *Periplus* * says, that

* P. 25 and 34.

at the mouth of the *Narmadá*, they used boats, which they called *Trappaga* and *Cotymba;* and we read in the *Ayin-Acberi*, that in *Gujarát* the cargoes of ships are put into small vessels, called *Tahwery*, and thus carried ashore *. My Pandit informs me, that the true pronunciation is *Táberi*, and in a derivative form *Tábericá*, from which the European sailors made *Trappaga*. *Cotymba* is no longer in use in that country; but, from derivation, it implies a boat made of the trunk of a tree, and seems to answer to the cathimarans on the Coromandel coast. 'When,' says our author, 'several of these canoes are put together, they are then called *Sangará*,' (from the Sanscrit *Sangraha* an assemblage;) but in *Gujarát* they are called *Júrá*, from their being coupled together. The king of the country about *Calyán* and *Bombay* was called SARAGANES; but the true Hindu name was SARANGA, or SARANGE'SA. He was very friendly to the *Greeks:* but, his kingdom having been conquered by SANDANES, they were no longer allowed to trade there †. He was king of *Ariaké*, the country of the *Aryyás;* who were foreigners, according to the *Brahmánda-puráńa* ‡, and were denominated SADINOI, according to PTOLEMY, from the Sanscrit *Sádhana*, lords and masters. Thus, the Portugueze were, and are even to this day, styled, in *Bengal*, *Thácurs*. The English, in the spoken dialects, are called *Sáheb-lógs;* but, by learned men, *Sádhana Engriz;* and all these denominations signify the lords and masters. Thus, the famous BHÓJA is generally styled, in the west, SA'DHANA, or SA'DHAŅA BHÓJA. Such probably is the origin of the name of SANDANES, king of the *Sadinoi*, or *Sádhanésa*. I shall speak more fully, in the next essay, of these *Aryyás*, in whose country was a famous

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* Vol. 2d. p. 78. † Arriani Peripl. p. 30.
‡ Section of the earth.

city, called by PTOLEMY *Banawási*. It still exists, and great was its fame in ancient times; but my inquiries concerning it have hitherto proved fruitless.

In the eighth century, VANA-RA'JA built *Narwaleh*; and his friend CHAMPA built also the famous town of *Champá-nere*. In the tenth century, according to MASOUDI, *Manhawer* became again the metropolis of the *Bala-ráyás*; but in the latter end of the eleventh, and in the beginning of the twelfth centuries, they returned to *Narwáleh* or *Narwáreh*; and in the year 1022, SULTAN MAHMUD passed through it, and was much delighted with its situation. The princes of *Málwa* resided at first at *Ujjayiní*, but MUNJA transferred the seat of Empire to *Soń'itpura* in the *Dekhin*, according to the appendix to the *Agni-puráva*, and now called, after him, *Munja-pattana*. It is situated on the banks of the *Gódávérí*; but whether it be the same with *Pattana*, or *Pratishtán'a*, where SA'LIVA'HANA is supposed to have resided, is unknown to me; though I suspect that the latter is a little higher up the river, and is called *Baithana* by PTOLEMY, who says, that in his time it was the metropolis of king SIRI-POLEMAIOS, the nearest denomination to which, in Hindi, is SRÍ-PULOMA', or SRÍ-PULIMA'NA. *Soń'itpura* implies the city of blood, and was thus called, according to tradition, because MUNJA's army was defeated there, with immense slaughter, and himself lost his life. His being killed in the *Deccan* is mentioned in the *Ayin-Acberi* *. The old city of *Benares*, north of the river *Burn'á*, and now in ruins, is sometimes thus called, and tradition variously accounts for it. MUNJA's successor resided afterward at *Dhárá-nagara*, now *Dhár*, and called also, according to lexi-

* Vol. 2d. p. 55.

cons, *Aś'árapura*, *Aś'ára-gṛ'iha* or *Aś'ára-gur*; which is probably the town called *Zerogere* or *Xerogeri* by PTOLEMY. *Bammogara*, mentioned by the same author, is probably *Bamun-gauw*, or *Bamun-gur*, on the northern bank of the *Narmadá*, about thirty miles S. W. of *Mandow*, and noticed in a route from *Sultanpoor*, on the *Tapti*, to *Ujjayiní*.

The immediate predecessor of VANA-RA'JA, at least in the corrected list, is styled NRĬ-PATI, the lord of men, or the emperor; but there was an interregnum; for there were, at that time, neither *Bála-Ráyás* nor emperors in *Gujarát'*; and the whole country was subject to the emperors of *Canoge*; for VANA-RA'JA' seized upon the royal treasure, on its way from *Gujarát'* to that metropolis.

In these lists, and also in those from the *Puráńas*, the names of many kings, posterior to the *Christian era*, are hardly reducible to the Sanscrit standard; and most of them seem to be epithets, and nicknames, borrowed from the vulgar dialects; or else names of persons of low tribes.

In our list we read first, "then will appear princes of the *Chauhána*, *Chawd'a* and *Gohíla* tribes." DIS'ACA, the first emperor was a *Yádava*, or from the *Yadu* tribe. After the eleventh king, called DA'HIMA', "then will appear the following tribes, the *Cshálás*, *Macwáńas*, *Huńas*, *Bhoanas*;" all names in a plural form: and these tribes, except the *Hunás*, belong to *Gujarát*, and are still extant. What the author meant, by introducing them here, is not easily conjectured: but I suppose that there was an interregnum, during which, these tribes became independent in their own districts. "Then will come NICUMBHA, the *Jálíá*," or of the *Jálim* tribe. "His successor was THA'CA; when the *Ch'hárui-vi-hahá* appeared:" in some copies we read *Ch'háruada-vi-*

hahá, and the first part is to be pronounced nearly *Ch'háruara*, answering to the Persian *Chár-é-aur*, or the four associates.

The third table contains RAGHU-NA'T'HA's list, as current in the eastern parts of *India*. It begins with the *Cali-yuga*, or rather with the *Mahá-Bhárata*, or great war: but I have omitted the first part, prior to the times of MAHA'-BALI, as it has not the least affinity with the lists from the *Puráná's*, and throws no light on that part of the ancient history of *India*. MAHA'-BALI, according to the present list, reigned forty years and eight months; which is conformable to the *Puráná's*, in which he is said to have reigned 40 years, including the 12 years, during which his sons, the *Sumályádicas*, reigned together, and which are generally ascribed to him. From the first of his accession, to the first year of VICRAMA'DITYA's *era*, the present list allows 298 years, 6 months and 9 days; to which 56 years being added, it will place his accession to the imperial throne 355 B. C. which is very correct, as I have shewn in my essay on *Anu-Gangam*. Unfortunately, it is the only correct part in the whole list. The successor of MAHA'-BALI was CHANDRA-GUPTA, or CHANDRA-PA'LA, fostered or concealed by LUNUS; and who lies here concealed under the name of AMRI'T-PA'LA, for LUNUS is but a mess of *Amrit*, which CHANDRA-GUPTA is supposed to have been fed with, during the time of his concealment; and a reign of 28 years is here assigned to him, as in the *Puráńas*.

From the first of 'ADITYA's *era*, to the first of 'SUDRACA, there are 347 years, answering to A. D. 291: but in the *Cumáricá-c'handa*, it is declared, that he began his reign in the year of the *Cali-yuga* 3291, or A. D. 191; and other circumstances prove, that this date is true, or very nearly so. There are, to fill up that space, only nine kings, whose reigns

are of an excessive length; and 100 years exactly must be struck off. 'SUDRACA is also styled VICRAMA'DITYA; and here is the most material difference, between the various copies of the *Vansávali*: for in those current in the west, instead of 'SUDRACA, we read VICRAMA'DITYA, whose predecessor was BHARTRÍ-HARI, or 'SACWANT and SAMUDRAPA'LA his successor.

From the first year of 'SUDRACA, to the first of VICRAMA'DITYA the son of BAHRAM-GUR, there are 343 years, and only fifteen kings to fill up that space. He began his reign, A. D. 441, or 442, and of course we must strike off 100 years more from that period.

From the first year of this VICRAMA'DITYA, to MAHA'BHAT' and the first of the *Hejra*, there elapsed 196 years; which is about 16 years too many. From this period, to DE'VA-DHA'RA'-SINHA or BHÓJA, 148 years; which is too little by about 200 years; but by introducing here the 200 years we have struck off before, it will place either the accession or death of BHÓJA, in the year 970. From BHÓJA to TRAILÓCYA-PA'LA, or JAYA-CHANDRA, 192 years. 'SUDRACA, 'SURACA, called also 'ADITYA, 'SRÍ-CARN'A-DE'VA and 'SRÍ-CARN'A-RAJA-VICRAMA, was a famous conqueror and most powerful emperor. He is introduced, in the list of the kings of *Bengal*, as one of the successors of the famous BH'AGA-DATTA, the son of NARACA, king of *Pragyotisha*, in *Assam;* and to whom CA'NEYA' the black, or CRÍSHNA, restored the kingdom, after he had killed his father.

In that list, he is supposed to have lived 1367 years after the *Mahá-Bhárata;* which will place him about the beginning of the *Christian era;* but, according to the *Jainas*, who place the beginning of

the *Calí-Yuga* about 1000 years B. C. this will make his reign coincide nearly with the period assigned to it by the *Paurániics.*

The last king of *Bengal* was LACSHMAN'YAH, who was deprived of his kingdom by MUHAMMED BAKTHYAR, the general of COTUB-UDDIN, about the year 1207; for, in 1209 the same general was in *Gujarát*, and the emperor died also in that year. From the first of 'SRÍ-CARN'A-DE'VA, or 'SUDRACA, to 1207, there elapsed 1017 years, during which reigned 49 kings, at the rate of about 20. 7 years to each reign. The last dynasty in this list, consists of seven princes, who reigned 106 years in all.

The dynasty next to this is remarkable for the epithet of *Pála*, which every one of them added to his own name or title. The first of that dynasty was BHU'-PALA, who was still alive in the year of VICRAMA'DITYA 1083, answering to the year of CHRIST, either 1017, or 1027. BHU'-PA'LA had two sons, STHÍRA-PALA and VASANTA-PA'LA, who erected a singular, and at the same time sumptuous monument, in honor of BUDD'HA, at a place called *Sarnáth*, near *Benares*. This was in the year of VICRAMA'DITYA 1083, as recorded in an inscription found there some years ago, and inserted in the fifth volume of the Asiatic Researches. Tradition says, that before it was completed, it was destroyed by the Musulmans; and there is every reason to believe, that this was really the case. For the arches and vaults of the greatest part of the buildings which are now buried under ground, still retain the supports of sun-dried bricks, over which the arches were turned. In the year 1017 SULTAN MAHMUD took *Benares*, and the town of *Casam*, or *Cusuma*, now *Patna*, and went even as far as the country of *Ouganam*, or *Unga*, to the west of the *Cossim-bazar* river. The next year, he overrun again these countries, and penetrated

as far as *Kisraje*, or *Cachha-Raja*, in the northern parts of *Bengal*, called *Koge* by FERISHTA, and *Couche* by European travellers of the 15th and 16th centuries, (such as R. FITCH:) and *Cug* or *Coos-Behar* made part of it. In a manuscript account of *Benares*, compiled for me by learned men, about sixteen years ago, it is said, that according to tradition, this monument was built by a powerful prince, called BUDDHA-SE'NA, an epithet which implies that this king, whosoever he was, was a zealous follower of BUDDHA. He abhorred the Musulman name, and during the very first invasions, he was summoned to submit, and pay an yearly tribute, but refused.

The Musulman army advanced, put every body to the sword, and destroyed the fort and the place; and it is obvious from the remains, that neither was completed. With regard to the date 1083, it was suggested to me that it may answer either to the year of CHRIST 1027, or 1017; because formerly the *era* of VICRAMA'DITYA was reckoned ten years earlier than now; and this mode of reckoning is still in use in the south of *India*. It was in use in *Cashmir*, at least some hundred years ago, as appears from the *Rája-Taranginí*. When this alteration took place, and when it was received in the northern parts of *India*, is not known. On my asking the reason of this correction, my learned friends did not appear to understand the subject well: but, from what I could gather from their conversation, it appears to me, that their ideas on this subject were, that the years of the *era* of SA'LIVA'HANA being Sydereal, are not subject to any variation. That the years of the *era* of VICRAMADITYA, which are now Luni-Solar, were not so formerly, and that the lunar years of it, instead of being regulated by the course of the Sun, and adapted to it, were formerly regulated by the revolution of Jupiter, the years of which were believed, at that early period, to be equal to as many solar

years*: for this planet, as seen from the earth, comes back to the same point in heaven, after a period of twelve years and five days; and in the *Deccan*, they reckon the cycle of Jupiter ten years earlier than in the northern parts. When the error was discovered, the years of VICRAMA'DITYA were made Luni-Solar, and they retained no further connection with the revolution of Jupiter. They added, that several corrections, more or less perfect, obtained at different times, and particularly one of fourteen years ascribed to BHAR-TRĬHARI, or rather referred to his time; and which was said to have been the length of his reign.

In that case, the demolition of the monument, which we are speaking of, took place in the year 1017, during the invasion of MAHMUD; for from that period, the Hindus, in this part of *India*, remained for a long time unmolested by the Musulmans. MODUD's invasion, in 1043, was directed toward the south; and in that direction only, he penetrated further than MAHMUD, as recorded in history.

King BHU'-PA'LA is called also MAHÍ-PA'LA, in this inscription; but these two epithets are synonymous, and signify he who fosters the earth, or world. STHÍRA-PA'LA, called DHÍR-PA'LA in the *Ayin-Acberi*, had a son called DEB-PA'LA, or DE'VA-PA'LA; who, in my opinion, is the same who is mentioned in the grant found at *Monghir*, and in the inscription upon a pillar at *Buddál*. His father was DHARMA-PA'LA, which probably was the title given to him, when he succeeded his father BHU'-PA'LA, called GÓ-PA'LA in the grant. The Hindus always have two names, one of them answering to our Christian names, and used in the

* Asiatic Researches, Vol. III. p. 216. &c.

performance of religious rites. Besides, kings have at least one title given to them, besides nicknames occasionally; and it is allowed to make use of synonymous terms; and thus Gó-pa'la, on ascending the throne, was indifferently styled Bhu'-pa'la and and Mahí-pa'la. The son of Srí-De'va-pa'la was Ra'ja-pa'la, perfectly synonymous with Bhu'pati-pa'la, as he is called in the *Ayin-Acberi;* for all *Rájas* are equally denominated *Bhú-pati.*

As the *Hunás* or *Huns,* are mentioned in the inscription at *Buddál,* Srí-De'va-pa'la must have lived at a period comparatively modern; for the *Huns* made their first appearance on the borders of *Persia,* in the time of Bahram-Gur, who began his reign in the year 421. In the year 458, *Balkh* was their metropolis; and, in the beginning of the seventh century, they were settled in the *Panjáb,* according to Cosmas Indicopleustes, who calls them White Huns; and they are the same, of course, with the *Abtelis, Abtelites* or *Enthalites.* It is the opinion of several well informed men, from *Cabul* and the adjacent countries, that the *Abdális* existed, as a nation or tribe, long before Muhammed; and that the denomination of *Abdáli* is not derived from the Persian word *Abdál,* the servant of God. In that case, they may be a remnant of the *Abtalis,* or *Abtelites.* It was about that time, that the dynasty of the *Hunás* in *India* began, and which is recorded by the *Pauráńics.* There were thirteen kings of them, and eleven more under the name of *Mauryas,* as it is supposed; but whether in due succession, or in a collateral line, or only partially so, is unknown. We find that their power extended even into *Gujarát',* as I observed before, about the *era* of Muhammed; and some think that *Maurya* is a contraction from *Mac'hwáńa* or *Mahá-Huńas;* for, in the west of *India,* they say *Maga,* and write

Mac'ha, for *Mahá;* and instead of MUHAMMED, they say, MAC'HOMAT and MAC'HOBHAT, as we used to do formerly in the west*. The *Macwán'ás* are noticed in the *Gujarát* list, and also in the lists from the *Purán'as*, in the chapters on futurity. In the Facsimile of the grant of *Monghir*, in the first volume of the Asiatick Researches, the date is plainly 132, instead of 32; but, had it been as obvious in the original, MR. WILKINS, and the Pandits, who read it with him could not have been mistaken. To decide this, recourse must be had to the original, which is, I believe, deposited with the Royal Society. The two Musulman travellers of RENAUDOT, in the ninth century, remark, that the *Hindus* did not, like the *Arabs*, use a general *era*, but reckoned the years from the accession of the reigning prince. This is acknowledged by the learned in *India*, and that it was the constant practice, till a period comparatively modern, and the limits of which it is not easy to ascertain. Several princes have attempted to set up *eras* of their own, and these princes, instead of *Saca-bandhis*, or *Sacwantas*, were styled simply *Samvaticas* or *Santicas*. Thus, VICRAMA'DITYA'S *era* was considered as *Saca* for the space of 135 years, and himself was then a *Sac-wanta:* but his *era* is now *Samvatsara*, or *Samvat*, and himself only a *Samvatica*; and the present *Sacwanta*, or *Saca*, is SA'LIVA'HANA. The Pandits, who assisted ABUL-FAZIL, took particular notice of that circumstance, and carefully pointed it out to him†. As the date in the *Monghir* grant is within the 135 years, during which the *era* of VICRA'MADITYA was *Saca*, it should have been styled thus, and not *Samvat:* and hence it may be concluded, that the date has no connexion with that *era*.

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* See Tamuli dictionary. † Ayin-Acberi Vol. I. p. 331.

The reason, why the famous Srí-De'va-Pa'la is not mentioned in the lists from the *Puran'as*, is, that he lived in too modern times, for they do not come so low. After the invasion of Sultan-Mahmud, in the years 1017 and 1018, the *Hindus* enjoyed some respite, till the last *Mahábhárat*, or great war, in 1192, when all the heroes of *India* fell in the plains of *Thán'u-Sar*. During that period, Srí-De'va-Pa'la might humble those of *Dravíra* and *Gurjarát* (that is to say the *Bala-ráyás*), and the *Hunas* in the *Panjab;* for he by no means conquered them; and he probably humbled them only, by refusing to pay some yearly tribute, and putting on a bold countenance, at the head of a powerful army. It seems, however, that he marched through the *Vindhyan* hills, to the west of the *Jumna*, and then went into the *Punjab*, as far as the borders of the kingdom of *Cámboja* or *Ghazni*. The time in which this expedition took place, cannot be ascertained, but within certain limits. After Modud's invasion, in the year 1043, the *Hindus* recovered some strength and courage, under the weak reigns of Togrul the usurper, and Furruck-Za'd. The enterprising Ibrahim succeeded him; but it was not till the year 1079 that he was enabled to lead an army into *India;* and probably the expedition of Srí-Deva-pa'la took place between the years 1052 and 1059, during the weak reign of Furruck-Za'd, of whom nothing is recorded.

The list of the kings of *Bengal*, in the *Ayin-Acberi*, was formed by Jainas, who place the beginning of the *Cali-yuga* only 1078 B. C. but it was afterwards altered by the followers of *Brahma*, and the beginning of it placed 3100 B. C. and the reigns of every king prodigiously lengthened, in order to make the whole coincide with the first year of the *Cali-yuga*. The *Rajás* of *Sirinagur* pretend to be descended from

BHAGA-DATTA, contemporary with CRĬSHNA; but in their pedigree, communicated by the present king, to Captain HARDWICKE, in the year 1796, it is acknowledged that for the space of 900 years after BHAGA-DATTA, nothing is recorded of his successors, not even their names *. If the same correction be introduced into the list of *Bengal* princes, it will place the reign of ANANGA-BHÍMA in the first century before the Christian *era*, and bring the whole list, at least, within the bounds of historical probability.

Through the uncertainty of *Persian* orthography, and the carelessness of transcribers, the names of these princes are most miserably disfigured; and I shall only observe here, that the real names of the three predecessors of SUDRACA, are SANCARA-SINHA, SATRUJITA, and BHÚPATI-PA'LA, or RA'JA-PA'LA. His successor's name is JAYADRACA, called CRĬSHNA in the *Purán'as*, and said there to have been his brother.

I shall now produce another list, which was brought from *Assam* by the late DR. WADE; and given by him to MR. HARINGTON. It was originally the same with the *Vansá-vali*, but it was new modelled, according to the ideas of the *Jainas*; though, I must confess, that it is difficult to say which is the original one. Be this as it may, it is certainly a most curious list, and in some instances it affords useful hints.

	yrs.	*ms.*	*days.*
To YUDHISHT'HIRA, - - - - -	1880	8	10
To MITRA-SINHA, - - - - - -	296	6	9

* Asiatic Researches, Vol. 6. p. 338.

	yrs.	ms.	dys.
To NRĬ-SINHA,	497	0	10
To VRĬJA-PA'LA,	334	6	19
To SADA'ŚVA-PA'LA,	327	11	9
To HA'MÍR,	152	0	1
To MA'DHAVA-SE'NA,	107	1	22
To SAILADHA'RA' or BHÓJA,	354	7	22
To RATI-PA'LA,	85	7	7

In this list, MITRA-SINHA is meant for JINA, and NRĬ-SINHA for GAUTAMA; and YUDHISHT'HIR is placed here, by the followers of JINA in the 1881st year of the *Cali-yuga* of the followers of BRAHMA', but in the beginning of their own, for which they have two different reckonings. According to one, the *Cali-yuga* began 1078, but according to the other, 1219 B. C. and this last computation has been adopted here. According to it, JINA or 'SACA was born 1207 years* B. C. or 12 years after the *Cali-yuga* and CRĬSHNA †. He lived 257 years, and died accordingly 950 years B. C. Those who place the beginning of the *Cali-yuga* 1078 B. C. say, that JINA was born in the year 1108, and died in 1036. Others, admitting the same *era*, say, that he was born in the year 1036, and died A. D. 950; and thus, whether he lived 257 or 77 years, his death equally happened in the same year before CHRIST.

The next is NRĬ-SINHA or GAUTAMA: NRĬ-SINHA is a well known title of 'SA'LIVA'HANA, and in the *Gujarát'* list I mentioned before, 'SA'LIVA'HANA is introduced in the solar line, in the room of SUGATA or GAUTAMA. This explains a passage from the

* See Kempfer.

† Asiatic Researches, Vol. 2d. p. 122 and 15.

Varáha-sanhita, in which it is said, that ŚA'LIVA'HANA, or ŚACA, the ruler of the period denominated after him, appeared when 2526 years of the *era* of YUDHISHT'HIRA had elapsed; that is to say, he was born 574 years B. C. and the year 544 is considered as that, either of his manifestation to the world as a legislator, or of his ascension into heaven. The *Jainas*, as well as the followers of BRAHMA', claim ŚA'LIVA'HANA as their own, and suppose that he manifested himself several times to the world; and as there are several VICRAMA'DITYAS, there are, of course, several worthies of the name of ŚA'LIVA'HANA.

VRĬJA-PA'LA, or BRĬJA-WA'LA, is the famous MAHA'-BALI: for the kings of *Magadha* were thus called, as I observed in my essay on *Anu-Gangam*; and this title was distorted into BIRDWAL and BERDAUL by Musulman writers. He is placed, erroneously, a little before the *era*, of VICRAMA'DITYA, by the compiler, for reasons which will appear immediately.

From this famous emperor, he passes to SADA'T-PA'LA, or SADA'Ś'VA-PA'LA, father-in-law of BAHRAM-GUR, and who gave him his daughter in marriage, about the year 426; thus passing over the dynasties of SUDRACA and ŚA'LIVA'HANA. The last dynasty, which he supposes to have lasted 500 years, our compiler has transported and brought down as low as the invasion of TIMUR, in the year 1398. This famous conqueror is generally called TIMUR-LENK, by Hindus, in their Chronological lists, and also in an inscription near *Bijigur*.

This account of ŚA'LIVA'HANA's dynasty at *Dílí*, and at so late a period, however strange, is not entirely groundless. TIEFFENTHALER, in his account of Subah *Dílí*, mentions two kings of that name, on the authority of some Persian writers, whom he does

not name. I saw the good old man, at *Lucknow*, in the year 1784. He was a man of austere manners, and incapable of deceit. His list of the kings, of the *Tomára* and *Chohan* tribes at *Dílli*, has certainly much affinity with those in the *Ayin-Acberi**: and the *Kholassey-ul-Towáric* and FERISHTA's account of the Subahs of *India*, are most likely the sources, from which the good father drew his information; but as these tracts are not at present within my reach, I cannot ascertain this point.

The *Bhats*, or *Bhattics*, who live between *Dílli* and the *Panjáb*, insist that they are descended from a certain king, called 'SA'LIVA'HANA, who had three sons BHAT, MAYA, or MOYE, and THAIMA'Z, or THA'MA'Z. MOYE settled at *Pattyáleh*, and either was a *Thánoví* or *Thawoni*, or had a son thus called. When AMIR-TIMUR invaded *India*, he found, at *Toglocpoor*, to the N. W. of *Dílli*, a tribe called *Soloun* or *Salwan*, who were *Thanovis* or *Manicheans;* and these he ordered to be massacred, and their town to be burned †. 'SA'LÍVA'HANA is generally pronounced 'SALWAN and 'SALBAN in the west, and NIEBUHR calls him SHAH-LEWAN.

The Manicheans were Christians; and when FATHER MONSERRAT was at *Dílli*, at the court of ACBAR, he was informed, that near that metropolis, and to the S. W. of it, and of course at *Toglockabad*, near the palace of PITHAURA', the usual residence of the ancient kings of that city, there were certain tombs, which were asserted to be those of some ancient princes of *Dílli*, who were Christians, and lived a little before the invasion of the Musulmans. If these tombs really existed, they did not belong to Hindus, who never erect any: they could hardly

* Vol. 2d. p. 62.

† Deguignes Histy. of the Huns, Vol. 5. p. 50.

belong to Musulmans, for it is scarcely possible that they should be mistaken by Musulmans; since the tombs of those among them, who fell in battle, or otherwise died, in the beginning of their invasions, are looked upon as places of worship; and those entombed there are considered, either as martyrs, or saints. In speaking of the tombs, and other monuments or events in *India*, FATHER MONSERRAT says, with much candour, 'I was told so in that country,' or, 'I was assured of it by respectable persons; but whether it be so or not, I cannot further say.' He explains himself in these terms, with regard to thirteen figures, in basso relievo, upon the rocks of *Gwalior*, which he visited in his way from *Surat* to *Dilli*, and which were supposed, by Christians in *India*, to represent our Saviour and his twelve disciples; one figure in the middle being a little higher than the rest. MONSERRAT says, that they were so much defaced, that no inference could be drawn from them, except their being thirteen in number*. The foregoing particulars, concerning the *Bhats*, SA'LIVA'HANA and his three sons, I obtained from an intelligent native, whom I sent to survey the countries to the N. W. of *Dilli*. He was employed, on that service, from the year 1786 till 1796; and, in the year 1787, he was in the country of the *Bhats*. His instructions were to inquire particularly, into the geographical state of these countries; and, whenever he could find an opportunity, to make inquiries also into their history and antiquities. At that time I knew very little about SA'LIVA'HANA, and was still less interested in his history; and of course that ancient prince was not mentioned to him; and the knowledge which he obtained, concerning him, among the *Bhats*, was merely accidental, and by no means in consequence of any previous directions from me.

* P. 164.

The Heresy of the *Manicheans* spread all over the western parts of *India*, and into *Ceylon*, at a very early period, in consequence of violent persecutions in *Persia*, during which the followers of MANES fled in great numbers, and at different times, into *India*: and it is even highly probable, that MANES remained a long time concealed in that country in the fort of *Arabion*, on the eastern banks of the river *Strangha*, now called *Chitrangh* and *Caggar*. The *Mesopotamia* here mentioned by ARCHELAUS the Bishop, is the five *Antarvédis*, or *Mesopotamias* of the *Panjáb*, commonly called the five *Bhéds* or *Bhedies*; and STRABO, speaking of the *Bhéd* or *Antarvédi*, between the *Chináb* and the *Jellam*, says, "in this *Mesopotamia*," and here the pronoun *this* has an obvious reference to the several *Bheds* or *Mesopotamias* of the *Panjáb*. The river *Strangha* is called *Saranges* by ARRIAN; and the *Chitrangh*, flowing from the northern hills, passes to the westward of *St'hán'u-sar* or *Thán'u-sar*, at some distance from which the water is absorbed by the sands; yet the vestiges of its ancient bed may be traced as far as *Bacar* on the *Indus*. The report of my native surveyor concerning this river, is also confirmed by the report of GENERAL THOMAS in his Memoirs *. There were *Bhats* or *Bhattis* in that country, long before the arrival of MANES; for PTOLEMY, in the beginning of the third century, takes notice in that country of two considerable towns, obviously denominated after them. The first is *Bata-nagra* or *Bhat-nagara*, the town of the *Bhats*. *Bhatnere* is the vulgar pronunciation of it; but the present town of *Bhatnere* is not the same with the *Bhat-nagara* of PTOLEMY; which was to the westward of the river *Beyah*, and is probably the town called *Bhattyaleh*. The other place noticed by PTOLEMY is *Batan-cai-sara*, a compound name; and in the true idiom of the Hindí

* Page 164.

language, *Bhatton-ki-sara*, or *Bhatton-ca-sara*, the pool of the *Bhats*. *Bhatton* is the plural form from *Bhat*, and *ki* or *ca* the mark of the possessive case; and *sara* is a pool or lake. *Bhatton-ca-sara* is according to the idiom of the dialect about *Dilli*; but at *Lahore*, and in the *Panjàb*, they would say *Bhattyan-da-sara*; for as they say there *Bhatti* for *Bhat*, the plural form is then *Bhattyanh* with a nasal *n*, and *da* or *di* are the usual marks of the possessive case with them. *Bhattyan-da*, is also a derivative form, implying as much as belonging to the *Bhattis*, and is synonymous with *Bhattyaleh*. From the situation assigned to it by PTOLEMY, I suppose it to be the same place which is called *Bhattinda*, to the N. N. E. of *Bhat-nere*. The *Bhattis* are shepherds, and various tribes of them are found in the *Panjàb*; and they also inhabit the high grounds to the east of the *Indus*, from the sea to *Uch*. These tribes are called *Ashambhetty* in the *Ayin-Acberi*; but several well informed men, who had long resided in that country, say that the true pronunciation is *Acsham-Bhatti*: which implies the many troops or bands of the *Bhattis*; because they go by troops selected from various tribes or families.

MANES gave himself out as the CHRIST, and had also twelve disciples; and, in the character of CHRIST, he became SA'LIVA'HANA in *India*. He had three disciples exalted above the rest, and their names were BUDDA or ADDAS, HERMAS or HERMIAS, and THOMAS; which I conceive to be the same with BHAT, MAYA or MOYE, and THAIMA'Z or THA'MAZ', the supposed sons, or rather disciples, of SA'LIVA'HANA. In the seventh century, there were Christians at *Serinda*, or *Ser-Hind*, with a monastery; and two monks from that place, at the command of the emperor JUSTINIAN, carried silk worms, or rather their eggs, to *Constantinople*.

The compiler of the list, brought from *Assam* by the late DR. WADE, was well informed, with regard to the last blow given to this dynasty of *Manicheans*, by AMIR-TIMUR, in the remains of a feeble tribe of them, at *Toglock-poor*. But it is much more reasonable, I think, to place the overthrow of that dynasty in the latter end of the twelfth century.

There was in *Egypt* a certain SCYTHIANUS, who had studied, it seems, at *Alexandria*, and visited the anchorets of *Thebais*. He went by sea to *India*, according to ST. EPIPHANIUS, and brought thence four books, containing the most extravagant notions: but he died, before he could preach his new doctrine, in the latter end of the second century. He was succeeded by his disciple, called TEREBINTHUS, who went into *Palestine;* but was obliged to fly to *Persia*, where he declared he was another BUDDA or BUDDHA, and, like him, born of a virgin, and brought up by angels, among certain mountains. Perhaps this new name was concealed in the old one TEREBINTHUS, from the *Arabic Daru-Botam*. *Botam* in *Arabic*, and *Butam*, or *Buthem*, in *Chaldaic*, signify a *Terebinth* in general; but the largest and best sort is called, in the former language, *Daru-botam*, which may possibly have some affinity with the *Buddham-gach'h*, or *Buddham-Teru* of the *Ceylanese* and BAUDDHAS in general, and which signifies the tree of BUDDHA, for *Gach'h* in the spoken dialects, and *Teru* or *Dru*, in Sanscrit, signify a tree. For he said, when he entered upon his mission, *Se non jam* TEREBINTHUM *sed alium* BUDDAM *vocari*, that he was no longer TEREBINTHUS, but another BUDDHA *. The TEREBINTH is unknown in *India*, except beyond the *Indus*, where I am told that there are forests, of that sort which produce the *Pistachium*, or *Pistachio*, called *Pistá*, in that country, and all over *India*.

* SALMASIUS de Homonymis, and Alphab. Tib. P. 370.

This name was probably given to him, in his infancy, by SCYTHIANUS, who was conversant with the notions of the Hindus. Having met with a strong opposition, from the priesthood in *Persia*, he was obliged to conceal himself in the house of a widow; where, falling from his bed, he broke his neck, and died. His writings fell into the hands of an adopted son of the widow, who became a convert to his opinions. CEDRENUS and SUIDAS say, that he was by birth a *Bráhmen*: a good musician, and an excellent painter. He maintained that he was the PARACLETE, and CHRIST; and the ignorant among the Christians, with his disciples, insisted that he was BUDDA or BUDD'HA, himself, regenerated; and he was afterwards regenerated, in the same manner with the Lamas, in the person of his disciple BUDDAS-ADDAS, or ADA-MANES, who, after many narrow escapes, was put to a most cruel death, by the king of *Persia*. His followers, being alarmed, left the country; and many, according to D'HERBELOT, retired to *India*. This is confirmed by the testimony of one of RENAUDOT's Mohammedan travellers, who went to *Ceylon*, in the ninth century; and says, that in that island there were many *Jews*, and *Manicheans* or *Thanovians*: for thus they were called in *Persia*. PETER the *Sicilian*, who lived in the ninth century, says, that a little before his time, a certain SERGIUS asserted, that TYCHICUS, the disciple of PAUL the apostle, had been regenerated in him; that he was the PARACLETE, and a bright star descended from heaven. He boasted that he had preached the Gospel in various countries, and particularly to the inhabitants of *Laodikeia*, near the country of the *Cynachoritæ*, in the East. The *Gangetic* provinces were known, at that time, in *Persia*, under the name of the country of *Canacor*, its metropolis: and *Laodikeia* is probably *Lhahé-dac*, or *Lhah-dac* as suspected by FATHER CASSIANO. This SERGIUS, a *Manichean*, appeared in the character

of CHRIST, and of the *Paraclete;* and was in *India*, and at *Lhá-dac*, in the ninth century, towards the latter end of which there appeared another SA'LIVA'HANA, in the country about *Dilli*, (according to the list brought from *Assam*, by the late DR. WADE). DEGUIGNES shows, that MANES propagated his doctrine in *Tartary*, where he was revered as a god. In the country of *C'hegil*, in *Tartary*, often mentioned in *Persian* Romances with *Khoten*, he erected several temples, which he adorned with pictures. His skill, as a painter, is greatly extolled, by Persian and Arabian writers, as well as his famous collection of drawings, in a book called *Erteng;* and every collection of pictures is still thus called to this day. Many authors, both ancient and modern, have laboured to find out the etymology of his name MANI; but it seems that it was his original Hindu name, which signifies a jewel in general, and is not uncommon, to this day, in compound names, as MA'NI-RA'MA, NÍLA-MA'NI, &c. It was the general opinion formerly, that MANES was a *Hindu*, and his father a *Bráhmen*. He was also called CUBRICUS. *Cubri* in Hindí signifies a hunchback; and *Cubrica*, in a derivative form, signifies, either a man who is crook-backed, or the son of such a man. His father's name was PATEKIUS, and *Pát'haca*, to this day, is a very common surname in *India*. CAROSSA, the name of his mother, is more obscure and uncommon. The *Manicheans* said, that CHRIST was the primeval serpent, who enlightened the minds of ADAM and EVE; the creator, the preserver, and the destroyer; the original soul, the preserver of the soul, and the fabricator of the instrument, with which the salvation of the soul is effected. He was born of the earth, and, for the redemption of mankind, suspended on every tree: for they saw him crucified on every tree, among its branches.

The reader will easily perceive some deviations

from what I had advanced in my essay on *Anu-Gangam*, which was already in the press, when I found, in perusing various tracts, several scattered passages, which have induced me to make the present corrections and additions. I shall conclude this essay with a few remarks on the various tribes which ruled over the countries bordering upon the *Indus*, and the *Vindhyan* mountains, according to the *Puráńicas*. The *Icshwácavas*, or children of *Icshwácu*, who ruled in the countries watered by the *Indus;* and this dynasty consisted of 24 generations. The *Abhíras*, or Shepherds, in the upper parts of the *Indus*, ten generations or reigns: then the *Sacas*, under ten kings, and probably kings of *Persia*. Then came eight *Yavana* kings, or Greeks of *Bactriana;* and fourteen *Tushárańas*, or from *Turán;* and these belonged probably to the *Parthian* dynasty. Then came seven *Garddabhínas*, thirteen *Moruńdas*, or *Buruńdas*, as many *Huńa* kings, and eleven *Mauńas*. Many suppose the *Moruńdas* and *Mauńas* to be dynasties of various branches of the *Hunas;* but they produce no authority, and it is of course a mere surmise. Be this as it may, they are acknowledged to be foreigners. The *Garddabhinas* are the descendants of GARDDABHA, or BAHRAM-GUR, who began his reign in the year 421. The *Hunas* are the white *Huns* of COSMAS-INDICOPLEUSTES. and consequently the same with the *Euthalites*, or white *Huns*, who were settled in the *Panjáb*, in the seventh century. The *Vindhya-Sacti* is a collateral dynasty, descended from KOSRU-PERVIZ, and which began between the years 820 and 830. Their metropolis was *Udayapura*, and the *Puráńicas* have recorded the names of seven of them, who reigned all together 90 years. The *Morundæ* of PTOLEMY are the same with the *Morunda; Burunda*, or *Buruńťa* of the *Puráńas*. They are only mentioned once, in the prophetic chapters; and are supposed, by some *Pandits*, to be a tribe of *Huns;* but this is a mere surmise, founded

on their being mentioned with that tribe. They were foreigners, and according to PTOLEMY, in the beginning of the third century, they were in possession of the countries, lying between the *Ganges* and the river *Cosa*, or *Coosy*, including *North-Behar* and the province of *Oude*. It seems, that their possessions extended even to the south of the *Ganges:* for OPPIAN says, that this river flowed through the country of the *Maraunthes* *. The country which they possessed constituted afterwards what was called the country of *Canoge*, denominated also the kingdom of *Bourou*, by the earlier Musulman writers: and this appellation is perhaps only a corruption from *Burunda*. The *Burundas* were probably thus called, because they were originally from the country, called *Porout* by DEGUIGNES, and which seems to have been the ancient name of *Tibot*, or *Tibet*, called also *Barantal*, in a derivative form, as *Bengal* from *Beng*. Its metropolis is called *Lassa*, *Barantala* and *Putala*. *Putala*, *Bootán* and *Tibot* seem to be derived from BUDDHA, called, in that country, BUT, PUT, BOT and POT. The natives of that country understand, by *Bootan* the kingdom of *Lassa*, and by *Tibot* the regions to the westward, toward the source of the *Ganges;* and this was, it seems, the country of *Porout;* and the idea seems to be confirmed by DEGUIGNES †. The kingdom of *Tibot*, according to Chinese writers, extended as far as the country of the *Brahmens*, in the year 589 ‡; and in the year 649, the king of *Tibot* invaded the inland parts of *India*, that is to say, *Benares*, according to DEGUIGNES. This account of these western dynasties, which ruled over the countries bordering upon the *Indus*, I shall resume, in an essay, both geographical and historical, on such parts of *India* as were

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* Oppiani Cynegetica, lib. 40, v. 164.
† Hist. des Huns, vol. 1, p. 59. ‡ Ditto, p. 164.

traversed by ALEXANDER. It is nearly finished, as well as the map intended to accompany it.

The doctrine of MANES could not fail of meeting with many admirers, in *India*, where he appeared in the character of BUDDHA, and of CHRIST, or 'SA'LIVA'HANA. Transmigration was one of his tenets; and the rule of life and manners, of his disciples, was very severe and rigorous. They abstained from flesh, fish, eggs, wine, &c. and the ruler of every district, and president of their assemblies, was considered as CHRIST; and, about the sixth century, they had gained considerable influence in the east. The *Bhattis*, in the west, are now Musulmans; but, as they are of a roving disposition, some tribes, at various periods, emigrated, and settled in the adjacent countries, particularly to the eastward of the *Ganges*. Such an emigration took place of late years, and they settled near *Chandowssey*, in *Rohilcund:* but, at a much more ancient and unknown period, they crossed the *Ganges*, and settled in the district of *Buddhaown*, and there built a fort, called, after their supposed grand-sire, *Cóte-'Sálivá-hana*, or *'Sálbáhan*, the fort of 'SA'LIVA'HANA, and which is mentioned in the *Ayin-Acberi*;* and this happened, before they had embraced the religion of *Islam:* they emigrated probably on account of some religious persecution; as well as the other descendants or followers of 'SA'LIVA'HANA, in the *Purganah* of *Baisyawárá*, about three days journey from *Lucknow*, and in the district of *Khairabad*.

These call themselves *Vais'yas*, or *Bais'yas*, and also the *Vais'yas* of 'SAL'IVA'HANA, *'Saca-Rája-vansas* and *'Saca-Rája-cumáras*, that is to say, the royal

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* Vol. 2d, Tucsim Jumma, p. 84

offspring of SACA or SA'LIVA'HANA. All the members of this tribe insist, that their chief is really an incarnation of VISHNU, in the character of SACA or SA'LIVA'HANA, regenerated like the presidents and chiefs of the *Manicheans*. This the chief, with affected modesty, seems rather unwilling to acknowledge; but in despite of his affected endeavours to conceal his divine origin, peculiar circumstances will betray him, and which are related, in numerous and fulsome legends, current through the whole tribe, and which I shall pass over. There are also, in the *Peninsula*, *Saca-vansas* or *Saca-Rája-vansas*, which signify, and are understood in that country, to signify, the offspring of SACA, or king SACA or SA'LIVA'HANA; and in the east, and also in the west, the followers of a deity, or some legislator and institutor, are often called his offspring*. It is but lately that I have been acquainted with this singular tribe of *Rája-Cumáras*, who do not differ from other Hindus of the same class, and have now lost every vestige of their ancient religion, except the name of their institutor.

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* Asiatic Researches, Vol. 8. p. 507.

APPENDIX TO ESSAY IV.

I.

PTOLEMY places *Ujjayiní* about 255 geographical miles from the mouth of the river *Mahí*, but the real distance is not above 200. The different places, mentioned by that author, between *Ujjayiní* and the sea, stand thus. From the mouth of the *Mahí*, to its supposed communication with the *Narmadá*, 60 G. M. to *Tiágura* 50: to *Minnagara* 50: to *Zerogere*, now *Dhár* or *'Aś'ára-gur*, 55: and to *'Ujjayiní* 40. The two last towns are erroneously placed by him, on the banks of the *Narmadá*, and I strongly suspect, that it is also the case with the two others. They are also placed on the left or southern bank of that river, which is not the case, unless perhaps with regard to *Tiágura*, which might have been situated to the south, either of the *Narmadá*, or some other river mistaken for the *Narmadá*. *Tiágur* is certainly a true *Hindí* denomination, and there are several places thus called, in the more southern parts of *India;* yet in this instance, I suspect that it is a mistake, for *Paya-gurra*, or *Pawa-gur*, to the south of the river *D'hád'hara*, mistaken by PTOLEMY for the *Narmadá;* because these places were said to be in the *tiram* of the last river. *Tiram* implies only the country bordering upon the sea, or a river: but it was misunderstood by travellers, and supposed by them to imply the banks of the *Narmadá*. Thus *Payagurra* was said to be in the *tiram* of the *Narmadá*, which is very true; and to the eastward of a river that runs by it. The *D'hád'hara* river runs afterwards very near to the *Mahi*, in the vicinity of *Brodrá;* and there might have been formerly a

communication, either natural or artificial, between these two rivers; and the nature of the soil, with the distance, certainly countenances the possibility of such a communication. The town of *Nasica*, placed by PTOLEMY on the *Narmadá*, I strongly suspect to be out of its place, and to have been originally meant for *Nasica* or *Nassuck*, near the source of the *Godáverí*, and to the N. E. of *Bombay*. It is also my opinion, that the *Sardonyx* mountains are misplaced by PTOLEMY: and indeed such is the construction of his map in that part, that there is no room for them in their natural place; and I take them to be those situated to the east of *Baroche*, between the *Narmadá* and the river *Mahí*, where to this day they dig for precious stones. In consequence of this erroneous construction, the rivers *Paddar*, *Sábhra-mátí*, and *Mahí* are confounded, and the whole peninsula of *Gujarát* disappears. The reason I conceive to be, that the shores were not frequented, on account of the vicious and untractable disposition of the natives. In the fourth century, mention is made of *Diu*, under the denomination of *Dibu* or *Divu**: its inhabitants were called *Divæi*, *Dibeni* and *Díveni;* and it appears that this denomination extended to the whole peninsula. In the same manner, the Musulmans gave formerly the name of *Soma-natha*, to *Gujarát*, from a famous place of worship of that name.

It seems, that the inhabitants of that country had, by their piracies, greatly offended the *Romans:* for we read that they were forced to send an embassy to *Constantinople*, and give hostages for their future good behaviour, and the famous THEOPHILUS was one of them. When

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* Philostorgius, p. 487. Ammian. Marcellin. lib. 220. Diu is called Dib in the Ayin-Acberi, Vol. 2d. p. 94.

we read in STRABO, that MENANDER conquered not only *Patalene*, but also the country of *Sigertis*, and the kingdom of *Tessariostus*, there is a strong presumption, that these countries were contiguous to each other. *Patalene* is well known; and *Sigertis* is from the Hindi *Seher-deś*, the country of *Seher*, or *Sehr*, mentioned in the *Ayin-Acberi*, where it is called *Seeree*, and its *Rája* SEHRIS, and by others SIHAR*. ABUL-FAZIL says, that it was bounded to the east by *Cashmir* (read *Ajmir*); to the west by the river *Mehran* or *Indus*. It had the sea to the south, and to the north the mountains, that is to say, the black mountains of *Uch'h* †.

I have met lately with respectable and well informed men ‡, from that country, who declared to me, that the country to the west of the *Indus*, between the river and the mountains, is called by the natives *Lehr* and *Lehereh*, and its inhabitants *Leheráï* or *Lehráï*. In the same manner the country to the eastward of the *Indus*, is called *Sehr*, *Sehereh*; and its inhabitants *Sehráï* or *Seheráï*. These two denominations might be written *Lehráhi* and *Sehráhi*; but the letter H is not to be sounded, and serves only to separate the two vowels.

The country of *Lehreh* or *Lehereh*, is called *Nedheh* or *Nedeheh* by EBN-HAUCAL §, and *Nodha* by EL-EDRISSI. The town of *Lehrwun* near *Hydrabad*, (and both cities are to the west of the *Indus*,) derives its name from that same source; but it is generally called *Nehr-wun* or *Nehrun*, *Nirun* by EL-

* Ayin-Acberi, Vol. the 2d. p. 146 and 149. † Do. p. 145.

‡ One of them was several years in the service of Gholam Mohammed Abassi, ruler of Sind. Abassi signifies a descendant of Abbas, not an Abyssinian.

§ See Major Ouseley's translation.

EDRISSI, and *Birun* by Persian authors, because in that language there is very little difference between the letters B and N. The whole country of *Nedheh*, or *Nehrwun*, from its capital in former times, is called *Nehrwun* or *Behrwun*, in the *Ayin-Acberi;* but it is omitted in the English translation, owing probably to some defect in the manuscripts in that part. Be this as it may, where we read *Pergunnahs separate* in the printed copy *, there is in the original *Nehrwun-na-Chand*, the districts of *Nehrwun*, and *Chand*. The latter is called *Chandu* of *Bacar* by ABUL-FAZIL in another place †, and *Sandur* by EL-EDRISSI. The famous port of *Lehri* or *Lehráhi-bunder* is thus called, because it is in the country of *Lehreh;* whilst another port, on the eastern branch, is denominated, from a similar circumstance, *Sehri*, or *Sehráhi-bunder*. It is called *Seuheri* by OTTER, and is situated to the westward of an arm of the *Indus*, which forms there a spacious lake, in some places seven or eight miles broad, and is noticed by ALEXANDER'S historians. It is well known to modern travellers and pilgrims; and *Sehri-bunder* at present is always called *Bustah-bunder*. This salt water lake or bay, (for its entrance is pretty broad,) was by the *Greeks* called *Saronis* ‡, and *Eirinos*, probably for *Seirinos*, from *Sehrwun* or *Sehrun* in a derivative form, as *Lehrun* from *Lehr* or *Lehreh*. It is called *Eirinos* by ARRIAN in his Periplus of the *Erythrean Sea;* and he says that it is hardly discernable at sea; and this is the reason why it is not noticed by modern navigators; but it is well known to travellers, who in general are pilgrims, going to worship at *Hinglaz*, near Cape *Moran*, the Hindu name of which is *Mudán*, wherein the letter D has a mixt sound between

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* Ayin-Acberi, Vol. II. Tukseem Jumma, p. 97, 100, and 103.
† Vol. II. p. 142. ‡ Plutarch de flum.

D and R, and signifies a head land*. The entrance is said to be about two cos broad, or three miles and a half. From *Bustah-bunder*, to *'Abád*, in a N. W. direction, they reckon twelve cos. It is upon the western bank of the main branch of the *Indus*, and is called *Hábáth* in the history of MAHMOOD the son of *Sebecteghin*, and erroneously *Ebját* by ABUL-FEDA, who calls it also *Mow*, which in Hindi implies a mart, or place remarkable for some manufactures, or peculiar traffic. This lake or bay communicates with the main branch of the *Indus*, called *Rishád* and *Dishád*, through an arm of the river; and the point of separation is near a place called *Poc'hyárí*, supposed to be either 16 or 20 miles from the sea.

This lake communicates with the sea, through two openings, or mouths: the largest of which is close to *Bustah-bunder*, and the other to the east is very small. East of it is a small place called *Lac-put-bunder* in *Cach'ha*, which owes its origin to king LAC-PATI, the grandfather of the present *Raja* of *Cach'ha*. These two openings answer to two inlets, noticed by MAJOR RENNELL, under the names of *Warrel* and *Puckár*, for *Pokyári;* thus called from the place of that name, situated where it branches out. The appellation of *Warrel* is unknown to the natives consulted by me, and they suppose that it might have been occasionally so called, from being resorted to by the pirates of the *Warrel* tribe.

Pilgrims, after having worshipped at *Dwárca*, be-

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* A legendary tale has been adapted to it, as usual; which is, that the head of GANE'S'A fell there. Hence it is called *Ganes'áca-mudá*, the head or scull of GANE'SA'; and a few miles inland, is a place of worship, called *Muda-cátá* GANE'SA', where it is supposed to have fallen.

tween *Bate* and point *Jigat*, cross the gulf of *Cach'ha*, land at a place called *Masca-Mu`dai*, in a small island, at the mouth of a river or creek. The mountains end at a considerable distance, and in the N. E. To the westward is a point of land, which I take to be that called *Massada* in old maps; and *Masca* seems to be the place called *Assarpoor* in modern maps. From thence, to that large branch of the *Indus*, called *Bányáni*, or *Aurunga-bunder*, they reckon three long days march, upon a high sandy beach; and the road, in general, is several miles from the sea. Two short days from *Masca-Mu`dai* is a small river, supposed by some to be an arm of the *Indus*, which branches out above *Sehwan*. They then proceed to *Lacput-bunder*, and cross a small arm of the sea; and then, in their way to *Bustah*, they cross in a boat the mouth of the salt water lake, and proceed to *Ghe`dá* or *Ghain`dá*, about a mile from the sea, and on the eastern bank of the *Bányáni*, which they consider as the main stream of the *Indus*, called *Meran* in the dialect of *Cach'ha*. *Ghe`dá* or *Ghain`dá*, may be pronounced *Gherá* and *Ghainrá*. It is a sacred spot, but there is no place of worship dedicated to Cotís`wara-Mah'a-deva, or with ten millions of *Phalli*. The Musulmans worship there the tomb of a saint of their own; and from this place, the branch of the *Indus* is also called *Gherá* or *Ghorá*. Then they go to *Shah-bunder*, either by the way of *Abád*, or *Pokyári:* and as *Shah-bunder* is now the seat of government, Hindu pilgrims in general call it *Thathá*.

They all insist, that, between *Masca-Mudai* and *Ghain`dá*, there are only three creeks, inlets or rivers; but, as they travelled several miles from the sea, they acknowledge, that there may be a few more, but which do not go far inland. The road is upon a flat ridge, several miles broad in some places, and con-

siderably higher than the country; and a pilgrim told me, that he had been informed, that there was an arm of the *Indus* running parallel to it, but that he did not see it. The whole ridge was probably thrown up by the sea, and is covered with a shrub called *Luni* in that country, *Jhau* on the banks of the *Ganges*, and *Ghezz* in *Persian*, at least in that dialect of it, which is used about *Candahar* and *Ghazni*. Hence it is probable, that the eastern branch of the *Indus* is called by PTOLEMY *Loni-bare*, from that circumstance. It is three or four feet high, and delights in very sandy and low places. Its stalk is very crooked, but its branches and leaves are somewhat like those of the cypress *.

The various branches of the *Indus*, according to the best information I could procure, stand thus. First, the small river before mentioned, but which is not reckoned as a mouth of the *Indus:* it is called *Asá*, from a place of worship, or rather consecrated spot, of that name. The second, called *Lac-put*, or *Pokyári*, and *Puckar*, in a map by MAJOR RENNELL. The third, *Bustah-bunder*, answering to *Warrel*. The fourth, *Bányáni*, *Ghaindá* or *Goráh*. *Kaar* is the fifth: then follows the *Jumná*, which is the *Hijjámány* of MAJOR RENNELL. The seventh is *Rishád*, or *Dishád*, called also *Divel*. The eighth is the *Jowá*, written *Juhoo* in the maps, with a little village to the west, called *Nowa-bunder*. The information which I was able to procure does not go beyond the *Jowá*, except concerning a small branch in the track of the pilgrims, within a few miles of *Cranchi* or *Crách*i, and which, they say, falls either into that harbour, or into the sea very near it. According to FATHER MONSERRAT, who wrote above

* It is the *Tamarix Indica Kœn.*

200 years ago, it falls into the harbour *. Through this branch, not now navigable, NEARCHUS's fleet sailed. Its entrance was obstructed by a bar, on which the sea broke with violence. They cut through it, and entered the harbour of *Corestis*, which is a corruption from *Cárách*, *Crách* or *Cranchi*. It is more generally called *Rámbágh*. The town and fort are several miles inland, and the place is called the fort of RAM by FRAZER, in his history of NADIR-SHAH. This account of the mouths of the *Indus*, has a great agreement with the early maps by MAJOR RENNELL, but none with his last.

When the *Greeks* sailed within sight of the land, they coasted along the *Delta*, as far as the point of land before mentioned; and then crossed the gulf of *Cach'ha*, or *Cantha*, thus called from a famous town of that name, still existing. This head land is particularly noticed by the author of the Periplus †. The Musulmans, bolder, crossed from the western mouth of the *Indus*, to an island called *Avicama*, which is a corruption for *Auca-mandal*, a district near *Dwáraca* ‡.

The country of *Sehreh* extends, toward the east, no further than *Lac-put-bunder*, on the sea shore; and there begins the country, called formerly, in the *Purán'as*, *Su-ráshtra* or *Surásht*, but now *Gurjjara-Ráshtra*, or the kingdom of the *Gurjjaras*. This compound is pronounced *Gurjjar-Rásht'ra*, *Gurjja-Ráshtra*, *Gárja-rasht*, and more generally *Guj-rásht* and *Guj-rát'*. This is the kingdom of *Tessariostus*, conquered by MENANDER, according

* The original MSS. of MONSERRAT's travels is in my possession. He speaks here from report only, and he accompanied the Emperor ACBAR in his expedition to *Cabul*.

† Arrian. Periplus, p. 23. ‡ See the *Nubian Geographer*, p. 60.

to STRABO. RENAUDOT's two Musulman travellers, in the ninth century, take notice of the country of *Haraz*, or *Geraz*, called in the original MSS. *Giourz*, or *Gourz*; for they used to write, formerly, *Gieuzerat* for *Guzerat*. His country was situated upon a promontory, or in a *Peninsula*, and there were many camels, and other cattle. He was a great enemy to the Arabs, and no prince had a greater aversion to the religion of MUHAMMED, and he was, at that time, at war with the *Bala-Ráya*. The Hindi name of the *Peninsula* is *Gurjara*, and *Gurjar-Ráshtra* signifies the kingdom of *Gurjara*. The whole country, from the *Indus* to *Dáman*, is called *Su-Rásht'ra*, its inhabitants *Su-Rásht'rán*, from which PTOLEMY has made *Syrastrene*, which is now pronounced *Soret* and *Surát*. Its metropolis, at a remote period, was the ancient city of *Téja*, in *Cach'h*, noticed in MAJOR RENNELL's map. Tradition says, that it was founded by an ancient king, called TÉJA, or TÉJA-CARNÁ. There were three brothers descended from ICSHWACU,—PURU, BUJ, or BOJ, and TEJA: the two first are noticed in the *Puráńas*, in the prophetic chapters, where PURU is generally called PURU-CACH'HA, and the other BUJA-CACH'HA.

The *Rájás* of *Cach'ha* boast of their independence; and pretend, that since the beginning of the world, they have never been conquered; and, that once they ruled all over *Gujja-rásht*. They have forgot the conquest of their country by MENANDER, which is well attested; for unquestionable vestiges of it remained in the second century, such as temples, altars, fortified camps, and very large wells of masonry, with many coins of MENANDER and APOLLODOTUS; and these monuments were found as far south as *Baroach* *. PLUTARCH † says, that the

* Peripl. Maris Erythræi, p. 24 and 27.
† Plutarch, de flum. v. Hyphasis.

Hyphasis, or *Beyah*, falls into this lake or bay, and thence into the sea. PHILOSTRATUS, in his life of APOLLONIUS, asserts, that this river falls into the sea, through a distinct mouth. This certainly could never be the case according to our ideas; for there is an uninterrupted range of mountains, reaching from *Dílli* and *Agra* to *Bacar* on the *Indus:* but it might be otherwise according to the fanciful notions of the Hindus. We have a similar instance in the *Gangetic* provinces, with regard to the *Jumná* and *Saresvatí;* which fall into the *Ganges*, at *Allahabad*, and the three rivers flow conjointly, but without mixing their waters, as far as *Tribeni*, near *Nyaserah*, above *Hoogly;* where they divide again: and the *Jumná*, called in *Bengal*, *Jubuná*, goes to the left, and falls into the sea, in the bay or river of *Roymungul*. The waters of each river may easily be known; for those of the *Jumná* are of an azure colour; those of the *Saresvatí* white; whilst those of the *Gangá* have a muddy, or yellowish tinge. These appearances, which are owing to various circumstances, such as the depth of the river in some places, its shallowness in others, the reflection of the clouds, or of the sky, are thus accounted for by Hindus in their own way. *Pattalé*, *Pattalené*, called also *Pathalia*, seems to derive its name from a famous place of worship, dedicated to a form of the deity, with the title of *Pat'há*, which, in Hindi, signifies youthful: and from *Pathá* comes *Pathála*, as *Bengálá* from *Renga*. It is one day's march to the south of *That'há*, and two to the north of *Shahbunder;* and not far from the western bank of the *Indus*. The Musulmans took possession of it about five or six hundred years ago, according to tradition; and there lies entombed one of their saints, called *Peer-Pathá*, or the youthful saint. This place is, of course, resorted to both by Musulmans and Hindus; but the latter pay their vows only at a distance, to their own deity. It is on the site of *Brah-*

minabad, called also *Mánhá*war* (and *Máhaurá*, by Persian authors). *Bacar* is also called *Mánhá*war:* but its true name is *Bánhaw*ár*, the *Binnagara* of PTOLEMY, and the same, I believe, which is called *Panœoura*, by STEPHANUS, of *Byzantium*, and *Bá-haurá*, or *Bahur*, by Persian authors*; situated in lat. 27° 47′, as the lower *Mansurá* is in lat. 24° 0′ North. It was afterward called *Mansura*, which is also the name of another city, lower down the *Indus*, one day's march from *Mánhaw*ár*, and three from *Shah-bunder;* the real and original town of *Daibul*, or *Devel*, which last was three days from the sea. The lower *Mansoura* is now *Thathá.*

II.

IT is asserted in *India*, that the *Máhrátás* are foreigners; and this they themselves acknowledge. The *Ránas* of *Udaya-pura*, and their tribe, who are related to the *Máhrátás*, boast of it; and say, that they are descended from NUSHÍRVA'N. The *Parsis*, in *India*, fix the time of their emigration in the time of ABU-BECR, who reigned only two years, in 632 and 633. That several emigrations from *Persia* took place, at different periods, in consequence of the fanatic zeal of the Musulmans, and their persecuting spirit, cannot be doubted; but the emigration of the children of NUSHÍRVAN is the most ancient. Some of these emigrants retained their ancient religion, and are called *Parsis;* others turned Hindus, and are called *Ránas* and *Máhrátás.* Some afterwards adopted the religion of MUHAMMED, and are called in the Peninsula *Nevetehs*, new men or converts. Though they all agree that they came from *Persia*, and are the descendants of NUSHÍRVA'N, yet there

* See ABUL FEDA, in the first vol. of Thevenot's collection, &c.

are various accounts concerning the time of their emigration, the manner in which it was effected, and the number of the emigrants. There were probably several emigrations; the memory of which has been preserved only by tradition; and there have been two powerful princes of *Persia*, called NUSHÍRVA'N; but we are not told which of them is meant in these traditions. As they all agree that these emigrations are posterior to the time of MUHAMMED, we may infer that they are descendants of KHOSRU-PERVIZ, who was also sirnamed NUSHÍRVA'N. This last was the grandson of the great or first NUSHÍRVA'N; and, in either case, they are certainly the descendants of the latter also: but in my opinion, the first emigrants were the sons of KHOSRU-PERVIZ, and the great grandsons of the great NUSHÍRVAN. ABUL-FAZIL is the first *Persian* author who took notice of these emigrations, on the authority, it seems, of traditions, and perhaps written records, in the family of the princes of *Udaya-pur*. There are also, in the Peninsula, written accounts, none of which I have yet seen; but I have conversed with several well informed men, and of great respectability, who had perused them. They were also seen by the late Nawab ALI-IBRAHIM-KHA'N, first magistrate of *Benares*; and who, about twenty-five years ago, wrote a short *Persian* account on that subject, which is now in the possession of his son, who lent it to me. This illustrious descent of the RA'NA of *Udaya-pur* is noticed by DR. HUNTER*, and the origin of the *Peshwás* from those princes, and, of course, from NUSHÍRVA'N, is amply detailed by BERNOULLI, in his third volume. The descent of the *Parsis*, in *India*, from the same source, is related by MANDELSLO, and other travellers.

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* Asiatic Researches, Vol. VI. p. 8.

The origin of the *Máhrátás* is also noticed in the *Scanda-purána*, in the section of the *Sahyádri*, or mountains of *Sahya*, for thus the ghats are denominated in Sanscrit, and *Sáhyân* or *Sakyân*, on the *Malabar* coast. Unfortunately the second part of this section, in which the origin of the *Máhrátás* was inserted, is so very scarce, that it is supposed to have entirely disappeared, and to have been destroyed by them; as the account given of their origin, was by no means a very honourable one. With the destruction of this part only of the Hindu sacred books, they can fairly be taxed; and the Hindus are, on the contrary, under the greatest obligations to them for the preservation of the rest. Wherever the *Máhrátás* go, they buy all Sanscrit books indiscriminately, and give any price for them; so much so, as to render them very scarce in every country but their own. Be this as it may, it is affirmed, that they have destroyed the second part of this section, the contents of which are yet by no means forgotten. There are still living many persons, both respectable and well informed, who well remember having read that unlucky paragraph. For this reason, they are branded with the appellation of *Mléch'has* or barbarians, by those who have suffered from their tyrannical and cruel behaviour; which, for a long time past, is at least equal to that of any foreign tribe, that ever invaded *India*, with regard to extortions, plunder, and other acts of cruelty.

Three different dates are given of this emigration; the first in the time of ABU-BECR, in the years 631 and 632; the second in the year 651, after the defeat and death of YEZDEJIRD; and the last, when the descendants of ABBAS, the uncle of MUHAMMED, began to prevail in *Persia*, about the year 749: and these are probably three different emigrations. The last has been adopted by the late Nawab ALI-IBRAHIM-

KHA'N. According to some, a prince of the royal family, in the province of *Lar* or *Laristan*, embarked with 18,000 of his subjects, and landed, at three different places, near *Surat*, and in the gulf of *Cambât*. This prince was a son of NUSHÍRVA'N; and the emigration took place in consequence of a violent persecution from ABU-BECR.

Another account states, that they were all secretly conveyed on board ships, and thus committed to the sea without pilots; and they all landed safely near *Surat*, where they were kindly received by the king of that country *. These various accounts are current in the western parts of *India;* and there is probably some truth in every one of them.

There are some inaccuracies in these accounts; first, ABU-BECR's conquests never reached beyond *Chaldea;* and of course, he could not by any means, be the cause of this emigration, during a short reign of two years. Besides, 18,000 men are certainly too great a number to come by sea, especially as it is added, that they had only seven ships. The Hindu accounts mention only eighteen individuals, including a camel, from whom a tribe of *Máhrátás* is descended. These seventeen men were flung secretly into the sea, and were drowned. Their corpses were wafted to the shores of *India*, and there brought to life again, some by PARASU'-RA'MA, and others by a magician: for the Hindus could not handle this historical event, without new modelling it as usual, after their own way. The first emigration is asserted in general, to have happened in the beginning of the seventh century †. This induces me to think, that these seventeen persons were the sons of KHOSRU-

* History of the East Indies, by CAPT. COPE, p. 244.
† See MANDELSLO and others.

PERVIZ, called also NUSHÍRVA'N, who were conveyed away privately to *India*, by the order of their brother SHIROVYEH; and having disappeared, were said, as usual in the east, to have been put to death by him. SHIROVYEH has been already acquitted of the murder of his father, by the venerable and learned EBN-BATRICK, Melchite, or orthodox Patriarch of *Alexandria*, who was both a divine, and a learned physician. It is acknowledged by the learned, that we cannot read too cautiously the accounts of the wars, between the emperors of *Constantinople* and the kings of *Persia*, either by *Persian* or *Greek* historians, but more particularly the latter. EBN-BATRICK says, that KHOSRU-PERVIZ died of the plague, in confinement; and was soon followed by SHIROVYEH, his son, who died also of the plague. That the latter was a good and just prince; and that being a Christian, he put to death his brothers, who were heathens.

The history of KHOSRU-PERVIZ has been equally misrepresented: he was certainly a great man, but of ungovernable temper; and he has been also acquitted of the murder of his own father, by respectable authors. He was either the son-in-law, or the adopted son of the emperor MAURICE, and was much affected, when he heard, that the emperor had been basely murdered by the infamous PHOCAS. He resolved to revenge his death, and place MAURICE's son, the lawful heir and successor, upon the throne; and for this purpose, he waged a long and bloody war. HERACLIUS, who succeeded PHOCAS, tried every means to make peace with KHOSRU-PERVIZ; but, the only answer he received, was, "renounce the throne in favour of the lawful heir." Instead of which he is made to say "renounce thy crucified God." This I conceive to be impossible; as his only view, in waging war, was to replace upon the throne

a Christian. Whether he was sincere or not, is not now the question: this was at least his ostensible pretext. He never forced the Christians, in his own dominions, to renounce CHRIST; but he wanted them all to conform to the opinions of NESTORIUS, which he favoured greatly. In short, he has been supposed to have been a Christian: and certainly he had once an idea of becoming a convert: for he consulted the most respectable persons about him on that subject; but they disapproved of it, for this single reason it seems, that the Christians in general, were a perfidious and faithless race. When he took *Jerusalem*, instead of defiling and destroying the pale of the true cross, he sent it to his beloved queen, who was a Christian, under the care of the venerable ZACHARIAS, patriarch of *Jerusalem*. Neither can I believe, that he sold 90,000 Christians to the Jews; and that the latter bought them for no other purpose, but to put them to death next day in cold blood.

KHOSRU, having taken HERACLIUS prisoner, made peace with him, and agreed to release him, on his paying a certain sum of money. HERACLIUS feigned that he could not raise that sum, unless he was allowed to go and borrow it. KHOSRU set him at liberty, on his pledging his word that he would return: but HERACLIUS never did, and employed that money in raising another army. All those calumnies were invented by HERACLIUS and his adherents, in order to exasperate his own subjects, against KHOSRU and the *Persians*.

But let us return to the *Máhrátás:* According to the *Pauránics*, PARASU'-RA'MA, having extirpated the *Cshettris*, and filled the earth with blood, wanted to perform a sacrifice; but could find no *Brahmen* to assist, on account of his being defiled with the effusion of so much human blood. As he was stand-

ing on the summit of the mountains of *Cûcan*, he spied fourteen dead bodies, stranded on the adjacent shores below. These were the corpses of so many *Mléch'chas*, who had been flung into the sea, by their enemies, in distant countries in the west. They had been wafted by the winds, and were then in a high state of putrefaction. RA'MA recalled them to life, imparted knowledge to them, and conferred on them the *Bráhmenicál* ordination, and then bid them perform the sacrifice. From these fourteen dead men is descended the *Cucanastha* tribe of *Máhrátás;* thus called, because, since that time, they have always *staid* and remained in the *Cucán.*

There were three other individuals, whose corpses were similarly stranded, more to the northward, toward the gulf of *Cambay;* and these were brought to life again by a magician, and from them are descended three tribes, one of which is the *Chitpáwana;* and the *Ránás* of *Udaya-pur*, with the *Peshwah's* family, belong to it. The names of the two other tribes I do not recollect. These are probably the seventeen sons of NUSHÍRVA'N, supposed to have been put to death by their brother SHIROVYEH, and the times coincide within two or three years.

According to the *Pauránics*, there was also the dead body of a camel, belonging to the fourteen brothers: but of him PARAS'U-RA'MA took no notice. There was a magician, who wanted to perform certain magical rites, but could find no *Bráhmen*, that would assist at these nefarious ceremonies. He took some of the ribs of the camel, pronounced some powerful spells, and made men of them, and moreover conferred on them the sacerdotal cord. From them is descended the *Cárárá*, another *Máhrátá* tribe in the *Deccan.*

The *Peshwa's* family, of the *Chitpáwana*, wish

very much to be considered as belonging to the *Cucanastha* tribe, since they reside also in *Cucan*. We read in the *Ayin-Acberi*, that the ancestor of the *Ráná* family, and a descendant of NUSHIRVAN, was styled a *Bráhmen*, not because he was really so, but because he had been brought up by a *Bráhmen* *.

This ancestor of the *Ránas* meeting with no encouragement in the western parts of *India*, went into *Berar*, and at length became chief of *Parnáleh*. In the year of CHRIST 793, according to ABUL-FAZIL, that city was plundered, and many of the inhabitants perished. During the confusion, PATTA, called by some BANNA and RANA, a descendant of our adventurer, and then an infant, was carried by his mother to the country of *Meywar*, and received protection from king MANDALICA of the *Bhíl* tribe. He was raised by degrees to the confidence of the king; and, after his death, he murdered the four sons of his benefactor, and usurped the throne †. He was the founder of the dynasty called in the *Puránas Vindhya-Sactí*, the glory and might of the *Vindhyan* hills. It consisted of nine kings, who reigned altogether ninety years, during the greatest part of the ninth, and in the beginning of the tenth centuries ‡. There are still some of that family in *Berar*, who are also called *Ránás*, such as the Zemindars of *Màhaur* §.

It is the opinion of the Nawab ALI-IBRAHIM-KHA'N, and of the Musulmans in general in *India*, that the children of NUSHÍRVA'N were driven out of *Persia* by the *Abbasis*, whose dynasty began in the year 749; misled probably by some latter emigration of natives from *Persia*. To

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* *Ayin-Acberi*, Vol. II. p. 99. † *Ayin-Acberi*, Vol. II. p. 98.
‡ *Puranas*, prophetic chapters. § *Ayin-Acberi*, Vol. II. p. 72.

this account it is generally added, that the *Abbásis* sent them away privately in different ships; but none of the posterity of NUSHÍRVAN remained at that time. FIRUZ, the son of the last YEZDEGIRD, after the death of his father in 651, fled to *Khoten*, where he was kindly received; and in 662 was acknowledged king of *Persia*, by KAOTSONG Emperor of *China*, who made him captain of his body guard. FIRUZ died soon after, and his son NANICHE was appointed to succeed him in the throne of *Persia*. In 683, NANICHE went toward the frontiers of that country, with an army, to try his fortune; but meeting with no success, he returned to *China*, between the years 710 and 712, and died at *Sigan-fu* *.

The *Máhrátás* are called *Mahá-rásht'ras* in Sanscrit: *Mahá* is great and illustrious, and *Rásht'ra*, synonymous with *Raja-putra*, implies their royal descent; and their name also indicates, that they were acknowledged to belong to the second class on their arrival in *India*, and of course that they were not *Bráhmens*. When they came into *India*, there was a tribe of *Rásht'ras* or *Raja-putras*, called *Rators* in the vulgar dialects, and *Oraturæ* by PLINY: there was also another tribe, called *Su-Rásht'ra*, or the illustrious royal offspring. These are called *Syrastræ*, and their country *Syrastrene*, by PTOLEMY and others; and it is called, in the spoken dialects, *Surát'* and *Sorát'*. When our new adventurers had obtained power and influence, they assumed the superior title of *Mahá-Rásht'ras;* and by striking out such letters as become useless, when brought to the standard of the spoken dialects, we have *Mahá-rátá Máhráta* and sometimes *Máhrátor*, as *Rát'or* from *Rásht'ra*. Thus we have *Surát'* from *Surásht'ra*, and *Gujarát'* from *Gurjar-Rásht'ra*.

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* Deguignes, Hist. des Huns, Vol. I. p. 57.

III.

BY SAMUEL DAVIS, ESQ.

ALBUMAZAR, an Arabian astronomer, who lived at *Balkh*, informs us, that "the Hindus reckoned from the flood to the *Hejra* 720, 634, 442, 715 days, or 3,725 years."

The astronomical rules of BRAHMAGUPTA, who lived in the 7th century, were in use in ALBUMAZAR'S time (see Asiat. Researches, vol. 2. p. 239) and the term of BRAHMA'S employment in the creation, 17,064,000 years, to be deducted from the years expired of the *Calpa*, is a correction, which has subsequently been introduced into the Hindu Astronomy.

To find, therefore, the number of days expired from the creation, or rather, of days expired of the *Calpa*, to the beginning of the last *yuga*, we must, instead of proceeding as in vol. 2. p. 273, Asiatic Researches, proceed as follows:

Years expired of the Calpa to the end of the *Satya yuga* -	1,970,784,000
Treta yuga - - - - - - - -	1,296,000
Dwàpar - - - - - - - - -	864,000
To the *Cali-yuga*	1,972,944,000

As the years of a *Calpa*, to the days of a *Calpa*, so the above number of years, to the corresponding days.

It appears from BRAHMAGUPTA'S treatise, which is still extant, and likewise from the *Siddhánta Sirómani*, the work of a later author, that the number of

Savan, or natural days, contained in a *Calpa*, was 1,577,916,450,000 instead of 1,577,917,828,000, as given in the *Súrya-Siddhánta*.

In other words, the solar sidereal year, instead of containing $365^{D}\ 15^{D}\ 31^{P}\ 31^{V}\ 24'''$, was estimated to contain $365^{D}\ 15^{D}\ 30^{P}\ 19^{V}\ 30''$; and, therefore, we must multiply 1,577,916,450,000, by 1,972,944,000, and divide by 432,000,000; the quotient will be found to agree exactly with the number of days mentioned by ALBUMAZAR; that is, it will be 720,634,442,715, without any fraction.

It is therefore probable, that the true reading of the passage quoted should be, "the Hindus reckon, from the creation to the *Cali-yuga* (or the flood) 720,634,442,715 days; and from the flood to the *Hejra*, 3725 years."

It may, farther, with confidence be inferred, that *M. Anquetil du Perron's* conclusion, with respect to the late introduction of the *yugas*, which are the component parts of the *Calpa*, into the Hindu astronomy, is unfounded; and that the invention of those periods, and the application of them to computations, by the Hindus, must be referred to an antiquity which has not yet been ascertained.

IV.

ACCOUNT OF THE JAINS,

COLLECTED FROM A PRIEST OF THIS SECT, AT MUDGERI:

Translated by CAVELLY BORIA, Bráhmen, for MAJOR C. MACKENZIE*.

IN former times, the *Jains* being without a *Guru*, or spiritual director, to guide them in a good course of life, VRÍSHABHANA'T'HA TÍRT'HACAR† was incarnate in this terrestrial world; and reformed or corrected their errors; and made laws, purposely designed for this sect: he took upon himself the office of *Guru* of the *Jains*. At this time there existed five sects, viz. 1 *Sanc'hya*, 2 *Saugata*, 3 *Chárváca*, 4 *Yóga*, 5 *Mímánsá*.

This *Guru* composed several books, on the laws, customs, ceremonies and regulations of the *Jain* religion, from his profound knowledge, for the use and benefit of mankind.

The son of this *Guru*, who was called BHARATA CHACRAVARTÍ, conquered the terrestrial world, with all its islands; and ruled, for a considerable time, as chief sovereign, above all other inferior princes.

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* The language of this translation has been corrected; and some of the passages transposed: but without altering the sense. The orthography of Indian words has been, in general, adapted to the system of SIR WILLIAM JONES: which is usually followed in the Asiatic Researches; but, in instances of modern names of places and persons, where the original term has not been known to me, I have left the translator's orthography untouched. H. T. C.

† In *Prácrit*, TITT'HAYAR.; in *Canara*, TÍRT'HU'RU'.

Before the death of the *Guru*, as he had placed his son BHARATA-CHACRAVARTÍ in the government of the state, he appointed one of his disciples, in his own room, to guide and instruct the people of this religion, in following his instructions and laws; he gave him the sacred name of AJITA *, and departed from this world.

Since that period, the following principal *Tirthacars*, or pontiffs, were incarnate in this world at different times.

1 VRISHABHANA'T'HA, 2 AJITA, 3 SAMBHAVA, 4 ABHINANDANA, 5 SUMATI, 6 PADMAPRABHA, 7 SUPA'RS'WA, 8 CHANDRAPRABHA, 9 PUSHPA-DANTA, 10 SÍTALA, 11 SRE'YA'NSA, 12 VA'SUPU'JYA, 13 VIMALA, 14 ANANTA, 15 D'HARMA, 16 SA'NTI, 17 CUNT'HU, 18 ARA, 19 MALLI, 20 MUNISUVRATA, 21 NAMI, 22 NE'MI, 23 PA'RS'WA, 24 VARD'HAMA'NA.

These were the first *Gurus*, or pontiffs of this religion, who, as twenty-four incarnations of their first *Guru*, appeared in the beginning of the present age, or *Cali-yuga*.

Up to the beginning of the *Cali-yuga*, the world was ruled, at twelve different times, by twelve *Nara Chacravartís*, or monarchs, among whom are, 1 BHARATA, 2 SA'GARA, 3 MAG'HAVAN, 4 SANATCUMA'RA, 5 SA'NTI, 6 CUNT'HU, 7 ARASUBHU'MA †, 8 JAYASENA, 9 HARISHE'NA, 10 BRAHMEDATTA. These sovereigns of the world are said to have been *Jains*.

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* The *Jains* at *Sravana Bélligóla* say, that AJITA did not appear as *Guru*, until many years after the death of the first *Tírthúrú*. C. M.

† Should be 7 ARA, 8 SUBHU'MA, 9 PADMA, 10 HARISHE'NA, 11 JAYA, 12 BRAHMEDATTA. H. T. C.

Besides these, nine *Ard'hachacravartís* ruled at different times; their names are, 1 ASWAGRÍVA, 2 TA'RACA, 3 ME'RUCA, 4 NÍS'UNBHA, 5 CAITABHA, 6 BALI, 7 PRAHARANA, 8 RA'VAN'A, 9 JARA'SA'ND'HA: these were renowned by the title of *Vasudévacula**.

The government of these kings was overthrown by a race distinguished by the honorable title of *Prati-vasudéva-cula*, viz. 1 TRIPRÍSHTA, 2 DWIPRÍSHTA, 3 SWAYAMBHU', 4 PURUSHÓTTAMA, 5 PURUSHAVARA, 6 PUNDARÍCA, 7 DATTA, 8 LACSHMÍD'HARA, 9 NA'RA'YANA.

The title of the other inferior kings was *Mandaláḍ'hísa*. These *Narachacravartís* and *Ard'hachacravartís*, wresting the sovereignty from each other, ruled at different periods, up to the beginning of the present age.

Narachacravartí signifies entire sovereign, ruling, without interruption, the six parts or divisions of the terrestrial world †. *Ard'hachacravartí* signifies half sovereign; or who ruled three *C'handas* or divisions of the earth. The *Man'daláḍ'hís'as* were *Rájás* of particular divisions: these governed the world, at different periods, to the expiration of the last age.

In the beginning of this age, during the life of VARD'HAMANA SWA'MÍ, who was the twenty-fourth *Tírt'hacar*, or pontiff of the *Jain* religion, there was a *Man'daláḍ'hís'a*, called SRENICA MAHA'RA'J. In his reign, the religion and people of the *Jain* sect were protected; he reigned for a considerable time at *Rájagrihapúr*, and departed from this world. After his death, the kings CHAMUNDA'RA'YA, JANANTARAYA

* This designation belongs to those named in the subsequent list. H. T. C.

† The six *C'handas* of *Bharata varsha*.

and other princes (nine *Chólarus* and nine *Ballóls**) governed the dominions of *Hindustan*, to the time of BIJJALRA'YA, who ruled with renown in the city of *Calyâna*. Afterward, the *Dacshin* of *Hiudustan* was conquered bythe *Sábdapramáns* †, or those who receive and admit the authority of the *Védas*. Next, the kingdom was ruled by PRATA'P-RUDRA, *Rájá* of *Vórangall;* and, after his death, by the kings of *Bijaynagar*, called *Ráyil;* till the time of CRĬSHN'A-RA'YA and RA'MA-RA'YA; from which period, the *Dacshin* fell under different Musulman governments.

The *Jains* are divided into four classes or casts, in like manner as the followers of the *Védas*, viz. *Bráhmens*, *Cshatris*, *Vaisyas*, and *Súdras;* the *Bráhmens* are the priests, or ministers of religion, for the other three casts; their duty is to study the *Puráńas* and *Sástras*, but they have no *Védas*. However, they have the *A'gama Sástra*, treating of prayers and other religious duties. They worship the fire, in the ceremony of marriage, and in that of initiation *(Upanayana)* ‡. The *Jains* observe the time of mourning for their deceased relations, according to their casts, as follows: an ascetic or *Yati* should mourn for the death of his relations one minute; *Bráhmens* are to mourn ten days; *Cshatris*, five; *Vaiśyas*, twelve; *Súdras*, fifteen. Their lower or inferior cast consists of the Pariyas or *Chándálas*.

There are four orders of priests among the *Jains*, as among *Hindus* in general, 1 *Brahmachári* or student, 2 *Grĭhast'ha* or householder, 3 *Vanaparasta* or hermit, 4 *Bhicshuca* or mendicant.

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* The Ballóls or Balharas, as Sovereigns or Emperors of India, are mentioned in the relation of two Mahommedan travellers translated by Renaudot. C. M.

† So the *Jains* affect to call the followers of the *Védas*, as believing on hearsay, what they cannot know, or demonstrate to be true, from the evidence of their senses. C. M.

‡ This must arise from employing, at those ceremonies, *Bráhmens*

There are sixteen ceremonies, which the *Jains*, as well as the followers of the *Védas*, observe. Among which are, 1 *(Garbád'hana)* the ceremony at the consummation of a marriage, 2 *(Símant)* adorning a married woman's head with flowers, when she is six months gone with child, 3 *(Játacarma)* ceremony on the birth of a child, 4 *(Námacarma)* on naming a child, 5 *(Annaprasána)* when, at six months old, or within a year, the child is weaned, or first fed with other sustenance than his mother's milk, 6 boring the ear, shaving the head, and placing the sacred thread round his neck, 7 *(Viváha)* the first marriage, or rather betrothing, 8 *(Sástrábhasa)* the ceremony observed when the young lads begin to read the *Sástras*, at the age of five years, five months, and five days, 9 they also observe other ceremonies, together with those of funerals, &c. &c. &c.

They perform the ceremony of *Upanáyana*, or initiation, for a boy, between five and nine years of age; which is the period when children begin to study the books of the law. A student, till he is married, should tie only a thread round his loins, with a rag to cover his nakedness: he should carry constantly in his hand a small staff. This is practised till his wedding-day; when, as soon as he is married, he attains the second rank, or that of householder: then he may dress properly at his pleasure; and should now endeavour, by labour, service, or trade, to provide for, and subsist his family: he should act in all respects agreeably to the instructions of his preceptor. Besides these duties, there are six particularly assigned, to be performed in the station of householder, as follows: 1 Worshipping God; or the images of the ancient saints. 2 Venerating spiritual parents. 3 Studying or reading their holy books. 4 *(Tapasya)* internal or mental devotion, abstracted from all thoughts but that of the deity. 5 Making

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of the orthodox sect. The *Jains*, themselves, do not appear to worship fire. H. T. C.

and fulfilling of vows for the attainment of wishes. 6 Giving to the poor.

There are three classes of *Yatis*, or ascetics, among the *Jains*, viz. *Anuvrata*, *Mahávrata*, *Nirvána*. To attain the rank of *Anuvrata*, one must forsake his family, entirely cutting off his hair, throwing away the sacred thread, holding in his hand a bundle of peacock's feathers, and an earthen pot *(Caman'd'alu)*, and wearing only tawny coloured clothes: he must reside for some time in one of their temples. He next proceeds to the second rank *Mahávrata;* when, totally abandoning any degree of elegance in his dress, he uses only a rag to cover his nakedness, as a *Brahmachárí:* he still retains the fan and pot; he must not shave the head with razors, but employs his disciples to pull out the hair by the roots *. On the day, on which this operation is performed, he abstains from food; at other times he eats only once, daily, of rice put in the palm of his hand. Having, for a considerable time, remained in this state of probation, he attains the third degree of *Nirvána;* he then lays aside even rags, and, being quite naked, he eats, once every second day, of rice, put by others in the palm of his hand; carrying about with him the clay pot and a bundle of peacock's feathers: it is the business of his disciples to pull out his hairs; and he is not to walk, or move about, after the sun sets. He now is called by the dignified title of *Nirván;* and the *Jains* worship him as god of their tribe, in like manner as the images, which they worship in their temples, of their ancient *Nirváns* or *Gurus*. Yet they say, that these are not the likeness of God; "*because no one knows God,* or has seen his likeness, that he should be able to describe him." However, they adore these images of their *Nirvána-nát'hs* as gods.

* To the effects of this operation, they attribute the appearance on the heads of the images of their *Gurus*, which Europeans suppose to represent curly or woolly hair. C. M.

Agreeably to their laws, the *Jains* ought to make three ablutions daily, in the morning, afternoon, and evening. In the change and vicissitudes of all things, that degree of strictness is omitted, and they now wash only once a day before they eat: generally they eat their food on leaves, and sometimes in brass vessels; but that is not practised in this country.

The *Cshatris*, *Vais'yas*, and *Súdras*, among the *Jains*, may eat victuals dressed by *Jain Bráhmens*; but *Bráhmens* never eat food prepared by any but their own tribe.

"To abstain from slaughter is the highest perfection; to kill any living creature is sin." Hence the *Jains* abstain from food after sun-set, lest sin be incurred by depriving any animal, even the minutest insect, of its life, in their food; for the same reason, they never drink water without straining it through cloth.

The principal tenets of their religion, translated from a stanza of their books, follows: "The *Jains* should abstain from the following things, viz. eating at night; slaying any animal; eating the fruit of those trees that give milk, pumpkins, young bambu plants; tasting honey, flesh; taking the wealth of others; taking by force a married woman; eating flowers, butter, cheese; and worshipping the gods of other religions. To abandon entirely the above-mentioned, is to be a proper *Jain*." The *Jains* (even the young lads) never taste honey, as it would occasion expulsion from their cast. They never taste intoxicating liquors, nor any other forbidden drink.

A man who neglects to observe due precautions, that no living creature be exposed to danger, from the following five domestic occupations*, will not

* See Menu 3, v. 68. The same notion occurs there; but the orthodox have sacraments to expiate the involuntary sin. The *Jains*,

be admitted to the sacred presence of God. 1 In splitting firewood, 2 Forming the floor, and smearing it with cow-dung, 3 Cleaning the fire-place, 4 Straining water, 5 Sweeping the house. When about to perform these offices, he should first be careful that there be no insect, for it is a mortal sin to hurt any living being.

The women should marry before their monthly courses appear; though, owing to changes, and particularly their poverty and depression, they are now obliged to put off this ceremony till long after their proper age, for want of money to defray the expense. When a woman is unclean, she must stay at a distance from her relations, in unchanged clothes, for four days. On the morning of the fifth day she is permitted to mix with her family, after ablution.

A *Jain* woman never marries but once; and, if the husband dies when she is young, she must remain a widow as long as she lives, being forbidden to wear ornaments or delicate apparel, or to use nice food. In the western quarter, towards *Saondha, Caodyal,* &c. when the husband departs from the world, the widow's head is shaved in like manner as the *Bráhmen* widows of other countries; but this custom has gone out of use in this country for a considerable time: a widow never dresses elegantly; and is not allowed to wear glass rings, or the *Mangalasútra,* (an ornament on the wedding-day, tied round the neck of the bride by the husband,) nor to use the yellow and red colours, or paint, by which married women are particularly distinguished. While the husband lives, they may wear all ornaments allowed by the law: opulent people of this tribe are still permitted to dress like other *Hindus,* in all kind of costly apparel suited to their station.

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not admitting the efficiency of religious acts, are content to use precautions to avoid the sin. H. T. C.

When a man dies, they burn the corpse, and throw the ashes into water; the rich cast the ashes into rivers. They never perform other obsequies, as their law says, "the spirit is separate or distinct from the body, which is composed of five elements; when, therefore, the corpse is burnt, the several parts which composed it, return to their former state: consequently, to the deceased, no ceremony is due." After death, as nothing of him remains, therefore they omit to perform the monthly and annual ceremonies, which other *Hindus* observe on this occasion; and they give these reasons in vindication, "A man should feed himself with the best food, while he lives in this world, as his body never returns after it is burnt."

They further say, that the foolish people of other tribes, being deficient in sacred knowledge, spend money in vain, on account of deceased relations: for how can a dead man feel satisfaction in ceremonies, and in the feeding of others? "even a lamp no longer gives light by pouring more oil into it, after its flame is once extinguished." Therefore it is vain to make feasts and ceremonies for the dead; and, if it be wished to please relations, it is best to do so while they are yet living, "what a man drinketh, giveth, and eateth in this world, is of advantage to him, but he carrieth nothing with him at his end."

"A man of sense should believe only what he seeth with his own eyes; and should never believe what he heareth from others." The *Jains* do not (like the followers of the *Védas)* believe, that this world exists by the supreme power of God; for they say, that the world is eternal, and that its changes are natural. They deny, that the world is wholly subject to destruction, for all things are born by the power of nature; God only is exempt from *Carma*, or the frailties and inconveniencies of nature.

As the *Jains* profess, not to put faith in oral testimony, and only believe in what is perceptible to their own organs of sense; therefore, they do not believe that God is in the heavens above, "because *no one ever saw him,*" and they deem it impossible for others to see him; but they believe in their *Tírt'hacars*, as their ancestors have seen and given a full description of the first prophet or *Guru*, who attained the station of *Nirvána* by his extraordinary perfections and actions, to the satisfaction of mankind down to the present age. Since his time, they have images of the several *Gurus*, who succeeded him, and were incarnate as protectors of their religion. These naked images they worship in their temples with all due ceremonies; they consider them as gods, or rather as representatives of God, whom they describe as follows:—"He has a likeness, and no likeness; he may be compared to an image of crystal: He has eight good qualities, and is exempt from eight evil qualities. He is all wise; all seeing; the father, or the origin, of all; enjoying eternal bliss; without name, without relation, or beginning; infinite; undescribable." The eight evil qualities, from which the nature of God is exempt, are ignorance, mental blindness, pain incident to nature, the distinction of name, of tribe, delusion, mortality, dependence. He who possesses these good qualities, and has overcome these evils, or is superior to them, is the God of the *Jains*, or *Jinéśwara*, being incarnate in the shape or body of one of their *Gurus*, or *Tírt'hacars*. Therefore, the *Jains* worship the images of their *Gurus*, as the means of attaining the following stations:—1 *(Salóca)* a station whence God is beheld at a distance; 2 *(Samípa)* one in the presence of, or near, God; 3 *(Sarupa)* similarity to God; 4 *(Sayóga)* union with God. According to these several gradations, he belongs either to the order of, 1st, *(Grí-hast'ha)* a householder; 2dly, *(Anuvrata)* the lowest rank of ascetics; 3dly, *(Mahávrata)* the second; or 4thly, *(Nirvána)* the highest.

But a bad man, who leads an evil course of life, in contradiction to their sacred laws, departs at his end to hell, or *Naraca*.

The *Jains* of this country never follow any other trade than merchandise. They wear a cloth round the loins, a turband on the head, and a jacket to cover the body; and put a mark with sandal powder on the middle of their foreheads: some have a small circlet with red powder, in the centre of the sandal mark, by way of further decoration.

The following is the formula used by the *Jains* of the *Carnát'ac*, on beginning to perform their ceremonies.

"Now in the holy religion of *'Adi-Brahman*, of the philosopher who was created by the supreme power of God; and in the centre of the three worlds, in the central world, and in the island of *Jambúdwípa*, (in which appears the renowed *Jambú* tree;) southward of the great mountain of *Mahá-Méru*, in the land of *Bharat*, on the good soil of the renowned division of *Carnát'aca-Désa*, in the village or town of ——, and in the —— part or quarter of the present age of *Cali-yuga;* and it being now within the fifth division of time; according to the *Saca* of *Rájá Vicramárca*, (as accepted by many great and excellent people, who observe the gracious laws), and in the present year of 'Sa'liva'hana, and in the present year of the cycle ——— month of ——— fortnight of ——— and on this holy day, (including also weeks, stars, signs, hours, and minutes,) I now begin this," &c. &c. &c.

The preliminary form of addressing letters by the *Jains*, to one another, is as follows, viz.

"To him, who possesses all good qualities, who performs all charities (or bestows alms), according to

the laws, who observes the rules of the *Jains*, who has zeal to repair the *Jain* temples, who perseveres in observing the ceremonies of *Ashtamí* and *Chaturdasí*, (8th and 14th of each half month;) he who purifies his head by the drops of the sandal water, in which the images of the *Jains* are bathed, to such I bow my head," &c. &c.

As the *Bráhmens*, who follow the *Védas*, fast on the day called *Ecádasí*, (11th of each fortnight;) in like manner the *Jains* fast on the 8th and 14th days. (*Ashtami* and *Chaturdas'í*), twice a fortnight: they also worship the serpent *Nága*, on the festival of *Anantachaturdasí*, in like manner as other *Hindus*, and tie over their shoulders a red thread.

At this time, the *Jains* have four *Mat'hád'hipas*, or chief pontiffs, at the following places, 1 *Pénugonda* or *Pennaconda*, 2 *Canchí* or *Conjeveram*, 3 *Collapur*, 4 *Delhi*.

Their *Sannyásís*, for a long time back, have resided in these places, with power over all those professing their religion; these pontiffs teach their laws, duties and customs; and, if they observe any irregularities among their flocks, punish them according to the nature of the offence.

The *Jains* intermarry with women of other families, or *Gotrás*, and eat with the disciples of their several priests and casts. But, though the *Jains* of all countries are of the same religion, they should not employ the *Gurus* of one *Mat'ha*, or college, to attend funerals, and perform the ceremonies of another; but they are to behave with respect and civility to them, on account of their profession and rank.

Sravana-Bélligola is the principal residence of the *Jain Gurus*: even the *Jains*, below the *Ghats*, consider

it as the chief place; but with the permission of the head pontiff, as it is too distant from them, his disciples established three subordinate *Gurus*, in three different places, below the western *Ghâts*, at *Mooda*, *Beedeery*, *Caroocollom*, and *Soda*. *Jain Sannyásís* now reside in these places, to attend to the laws and ceremonies of their religion.

There is a famous image, of eighteen times the height of man, upon a rock near *Bélligóla*, named GÓMATÉ'S'WAR SWA'MÍ *.

In the books of the *Jains*, it is mentioned that there was formerly a golden image, of 500 times man's height, at *Padmanabh-pur*, which was inundated by the sea; and they believe that it can still be sometimes seen in the water.

They generally account modestly for all their tenets, and conduct themselves with propriety; and never assert that their bodies are eternal, and that there is *no God;* nor do they, like the Baudhists, say, "After death there is no pain in the flesh, or feeling: since it feels not pain, nor death, what harm is there in feeding upon it, when it is necessary to procure health and strength."

NOTICES OF THE JAINS,

RECEIVED FROM

CHA'RUCÍRTI A'CHA'RYA,

Their Chief Pontiff, at Bélligola, in Mysore.

"FOR the information of mankind, be it known, that the foundation of ages or times is countless; that the origin of *Carma*, or passion, is inconceivable; for the origin of the soul, or spirit, is too ancient to be

* This image is represented in the annexed drawing. At *Kurcul*, near *Mángalor*, there is also a gigantic image of *Gómatéswar*. C. M.

known: therefore, we ought to believe, that human kind is ignorant of the true knowledge of the origin of things, which is known only to the Almighty or ADÍS'WARA, whose state is without beginning or end; who has obtained eternal victory over all the frailties of nature and worldly affections.

There are two great divisions of time or ages, established in the universe by God; called *Avasarpiní*, and *Utsarpiní*: each of them are reckoned at ten *Crórs*, of *Crórs* of *Ságaróparnas**. *Utsarpiní* is divided into six portions, which are named, 1 *Atiduc'hamá*, 2 *Duc'hamá*, 3 *Duc'hamá Suc'hamá*, 4 *Suc'hamá Duc'hamá*, 5 *Suc'hamá Suc'hama*, 6 *Suc'hamá*. The second age, *Avasarpiní*, is also divided into six parts, by name, 1 *Suc'hamá*, 2 *Suc'hamá Suc'hamá*, 3 *Suc'hamá Duc'hamá*, 4 *Duc'hamá Suc'hamá*, 5 *Duc'hamá*, 6 *Atiduc'hamá*. These two grand ages, eras, or periods, as well as their divisions, revolve for ever in the universe, like the course of the fortnights, and the increase and decrease of the moon, in the regions frequented by mankind. The number of these regions is a hundred and seventy; ten of which are distinguished by the names of five *Bharatas*, and five *Airávatas*. These divisions are particularly explained in the book called *Trilócasataca*.

Among the ages abovenamed, the revolution of four *Crórs* of *Crórs* of *Ságaróparnas* was assigned to the first, or *Suc'hamá*. During that age, men subsisted on the produce of ten different *Calpavrĭcshas*, or celestial trees, called *Bhójanánga*, *Vástrangá*, *Bhúshanánga*, *Málánga*, *Grĭhánga*, *Racshanánga*. *Jyótiranga*, *Túryánga*, and *Bhájanánga*. Thus men used to subsist on the spontaneous produce of the trees; and kings ruled not the earth; all were abundantly

* Oceans of years. This measure of time will be subsequently explained. H. T. C.

happy; and the people of that age were distinguished by the name *Uttama-bhóga-bhúmi-pravartacas*, supremely happy inhabitants of the earth.

On the commencement of the second age, *Suc'hamá Suc'hamá*, which lasted for three *Crórs* of *Crórs* of *Ságaróparnas*, the miraculous gifts of the heavenly trees were less than in the former age, though they still supplied the wants of mankind and their subsistence; but the men of that age were inferior in complexion, stature, strength, and longevity: hence they were called *Madhyama-bhóga-bhúmi-pravartacas*, moderately happy inhabitants of the earth.

This was followed by the third age, *Suc'hamá Duc'hamá:* its measure is two *Crórs* of *Crórs* of *Ságaróparnas.* During this period, the people were still more straitened in the produce of the *Calpavrícshas*, as well as inferior in longevity, color, health and happiness: the people of this age were named *Jaghanya-bhóga-bhúmi-pravartacas*, or least happy inhabitants of the earth.

In these periods there were born, at different times, fourteen *Manus*, by name, 1 PRATIS'RUTI, 2 SANMATI, 3 CSHE'MANCARA, 4 CSHE'MANDHARA, 5 SRÍMANCARA, 6 SRÍMANDHARA*, 7 VIMALAVA'HANA, 8 CHACSHUSHMA'N, 9 YASASWÍ, 10 ABHICHANDRA, 11 CHANDRA'BHA, 12 MARUDE'VA, 13 PRASANNAJITA, and 14 NA'BHIRA'JA. The last *Manu*, having married MARUDE'VA', begot a son, named VRÍSHABHANA'T'HA TÍRT'HACAR.

The fourth age, called *Duc'hamá Suc'hamá*, is in measure 42000 years less than the amount of one *Crór* of *Crórs* of *Ságaróparnas;* and no miraculous fruits were produced in this age.

* Or SIMAD'HARA.

Before the commencement of the fourth age of the *Avasarpiní*, when the time of destruction appeared to be nearly approaching to mortals or mankind, through the disappearance of the *Calpavrĭcshas* or celestial trees, VRĬSHABHANA'T'HA TÍRT'HACAR was incarnate, in this world, as son of the fourteenth *Menu*, NA'BHIRA'JA, at the city of *Ayód'hyá*. By his auspicious birth (at the prayer of mankind, who were distressed for food, and were dying;) and by his instructions, the knowledge of good and bad, of possible and impossible, and of the means of acquiring the advantages of earth and of heaven, was obtained. He also, arranged the various duties of mankind, and allotted to men the means of subsistence, viz. *Así* the sword, *Masí* letters (literally ink), *Crĭshi* agriculture, *Vánijya* commerce, *Pásupála* attendance on cattle. Upon this arrangement, he became king over all mankind, and composed the four sacred books, called *Pra-t'hamánuyóga*, *Caranánuyóga*, *Charanánuyóga*, and *Dravyánuyóga*. Thus VRĬSHABHANA'T'HA TÍRT'HACAR established the religion of the *Jains*, in its four classes, or casts, of *Bráhmens*, *Cshatris*, *Vaisyas* and *Súdras*; and delivered the charge of those sacred books to their care. These writings becoming obsolete, and the language not being understood by the common people since that time, the meaning of the original has been explained, in various works, in the language of different countries. He also composed several books on the sciences, for the improvement of mankind.

After he had settled and arranged laws and regulations of all kinds, mankind, from that period, began to follow his institutions, looking on him, in every respect, as equal to God; and, upon his departure from this world, to *Mócsha*, or the state of the Almighty, his image was venerated as *Jainéswar*, or the Lord of *Jains*: as he had early subdued, by his wisdom, all worldly affections, and was relieved from restraints and carnal ties.

Before the departure of VRĬSHABHANA'T'HA TÍRT'HACAR, his wives were ASASVATÍ and SUNANDADEVÍ; by the former he had a son, named BHARATA CHACRAVARTÍ; and by the latter GÓMATE'S'WARA SWA'MÍ. The eldest, BHARATA CHACRAVARTÍ, ruled over the whole of the six divisions of the earth, and named it *Bharatacshétra;* from that period the earth bears his name. The metropolis of this king was *Ayód'hyá* (or Oude). After he had ruled for a considerable time, he appointed his younger brother, GÓMATE'S'WARA SWA'MÍ, to the government. Then abandoning the *(Carma)* actions or affections of mankind, he obtained the fruits of his sacred contemplation, and proceeded to *Mócsha*, or heavenly salvation.

GÓMATE'S'WARA SWA'MÍ, after he was charged with the government, ruled for a considerable time, in a town named *Padmanabh-pur;* in the end, he attained *(Nirvána)* beatitude in heaven, and departed thither. Since his death, the people worship him, in all respects, as *Jinéswara*, or God. From that period, twenty-four TÍRT'HACARS have passed, during the age of *Avasarpini*, up to the end of the *Dwápara-yuga*.

According to the *Jains*, there were born other twenty-four *Tírt'hacars* in the world, during the first age, besides the twenty-four from the birth of VRĬSHABHANA'T'HA SWA'MÍ. The names of the *Tírt'hacars* of *Atitacála* or past times, are as follow, 1 NIRMA'NA*, 2 SA'GARA, 3 MAHA'NA'THA†, 4 VIMALAHPRABHA‡, 5 SRÍDHARA§, 6 SUDANTA‖, 7 AMALAPRABHA ¶, 8 UDARA **, 9 ANGIRA ††, 10 SUMATI,

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* NIRV'ANÍ, in HE'MACHANDRA'S vocabulary. † MAHAYASAS, H. ‡ VIMALA, H. § The 5th is SARVA'NUBHU'TÍ, and 6th SRÍDHARA, according to HE'MACHANDRA. ‖ DATTA, H. ¶ Unnoticed by HE'MACHANDRA. ** DA'MÓDARA, H. †† Unnoticed by HE'MACHANDRA, who states, 9th SUTE'JA, 10th SWA'MÍ, and 11th MUNISUVRATA.

11 Sind'hu *, 12 Cusuma'njarí, 13 Sivaganga †, 14 Utsa'ha, 15 Gane's'wara, 16 Parame's'wara, 17 Vimale's'wara ‡, 18 Yasód'hara, 19 Crushta §, 20 Ganamurti ‖, 21 Sidd'hamati, 22 Srí'bhadra ¶, 23 Atriconta ⊥, 24 Sa'nti.

To the *Tírt'hacars*, who departed to *Mócsha* in the times of antiquity, the *Jains* pay a respectful adoration, even more assiduously, and with greater veneration, than to their *Tírt'hacars*, who were incarnate, according to their accounts, in the age, or period of time, called *Utsarpiní*.

In their prophecies it is said, that the following are the names of the *Tírt'hacars*, yet to be incarnate, in the future or next *Utsarpiní* period: 1 Maha'padma **, 2 Surade'va, 3 Supars'wana ††, 4 Swayamprabha, 5 Sada'tmabhu'ti ‡‡, 6 De'vaputra §§, 7 Culaputra ‖‖, 8 Udanca ¶¶, 9 Crusta ***, 10 Jayacírti †††, 11 Munisuvrata ‡‡‡, 12 Ara, 13 Nepompa §§§, 14 Nishcasha'ya, 15 Vipula'ça, 16 Nirmalla, 17 Chitragupta, 18 Sama'dhicupta ‖‖‖, 19 Swayam-bhu' ¶¶¶, 20 Anuvartaca ****, 21 Jaya ††††, 22 Vimalla ‡‡‡‡, 23 De'vapala §§§§, 24 Ananta Vírya ¶¶¶¶.

Their ancient *Tírt'hacars*, being endowed with the gift of prophecy, predicted the future succession of these *Tírt'hacars*, for the information of the world.

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* Unnoticed by He'machandra. † 'Sivagati, H. ‡ Anila, H. § Crtia'rt'ha, H. ‖ Jine'swara, H. ¶ 'Sivacara, H. ⊥ Syandana, H.

** Padmana'bha, according to He'machandra. †† Supa'rs'waca, H. ‡‡ Sarva'nubhu'ti, H. §§ De'vas'ruta, H. ‖‖‖ Udaya, H. ¶¶ Pe't'ha'la, H. *** Póttila, H. ††† 'Satacírti, H. ‡‡‡ Suvrata, H. §§§ Amampa, H. ‖‖‖‖ Sama'dhi, H. ¶¶¶ Sambara, H. **** Ya'sód-hara, H. †††† Vijaya, H. ‡‡‡‡ Malla, H. §§§§ De'va, H. ¶¶¶¶ He'machandra, having omitted one of the preceding (Ara), adds Bhadracrit as the 24th of these Jinas.

Thus it is truth, that time and age gradually revolve for ever; yet no decay or destruction arises hence to the universe, and its various worlds, to the earth, to spirits, and to souls; but the mortal bodies of mankind and *Dévatás* perish, while the *Vimánas** endure.

HISTORICAL AND LEGENDARY ACCOUNT

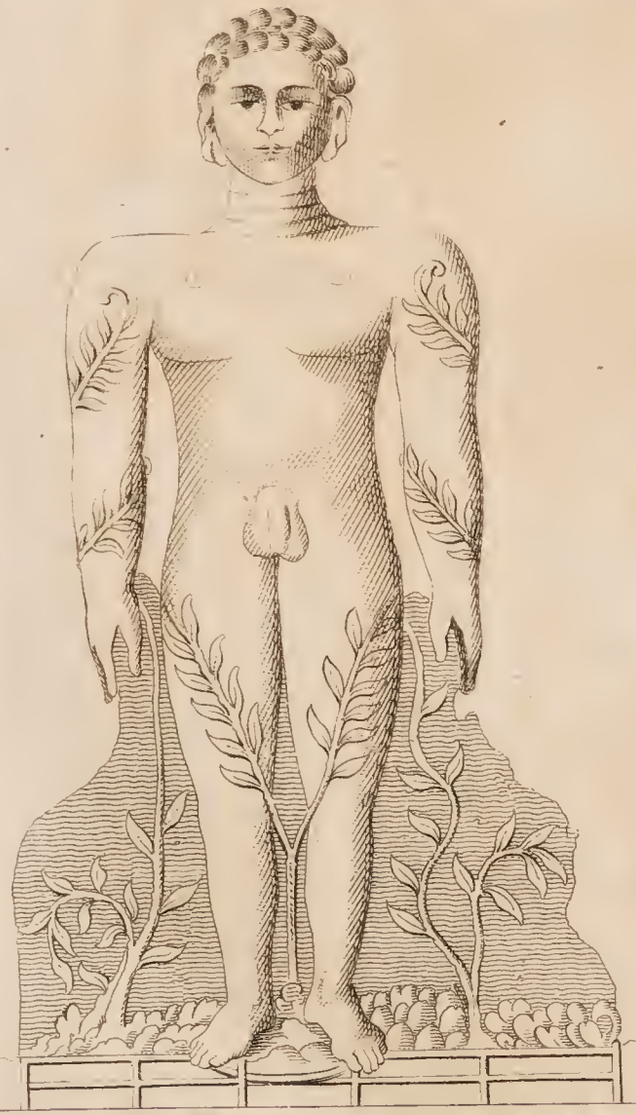
OF

BE'LLIGOLA,

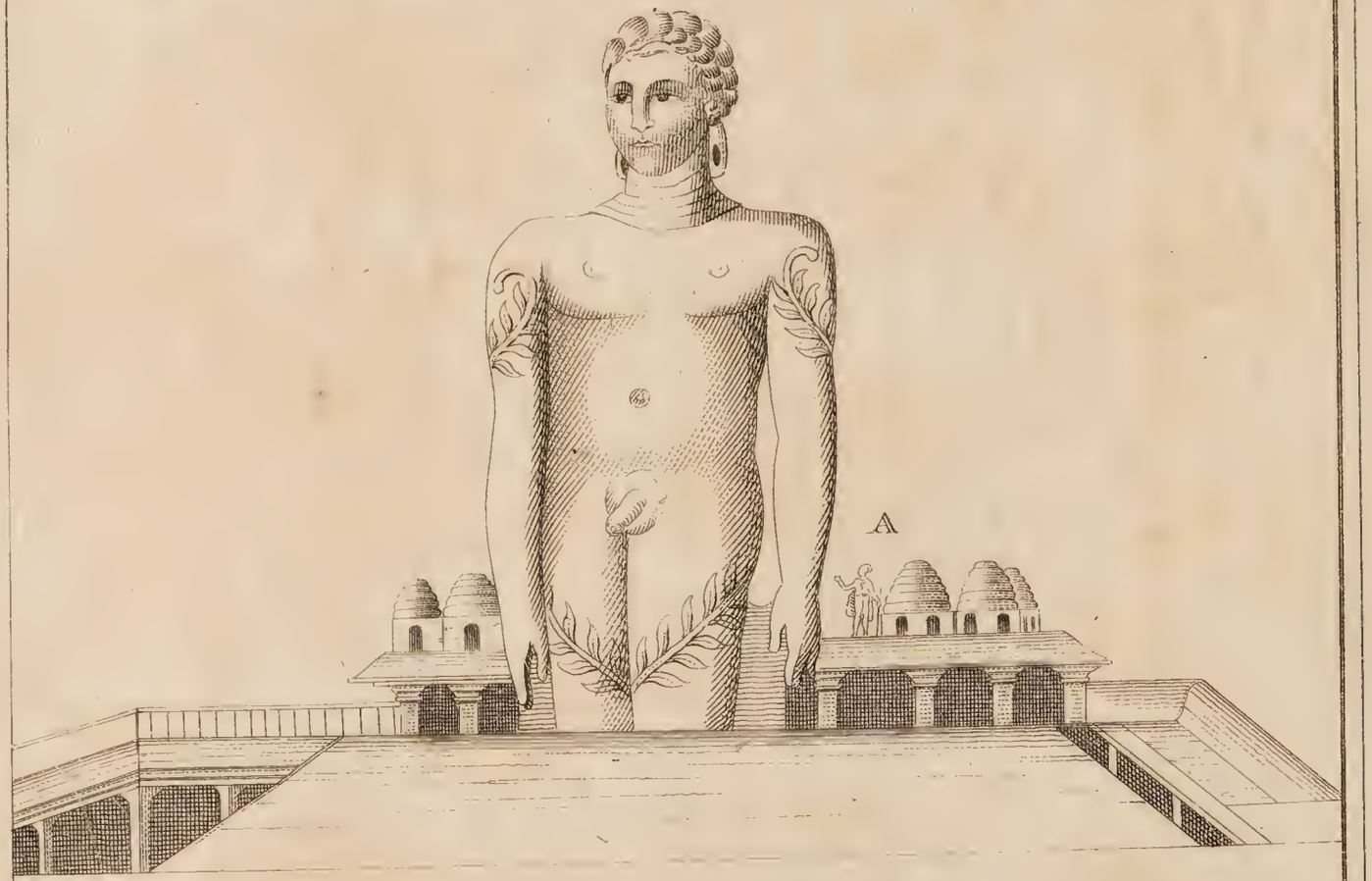
COMMUNICATED BY THE HIGH PRIEST AT THAT STATION.

IN ancient times, an image was at this place, self formed from earth, under the shape of GÓMAT I'S'WARA SWA'MÍ, which RA'VANA, the monarch of the RACSHASES, worshipped to obtain happiness. After many ages were elapsed, and on the access of the present age, a king of the southern dominions reigned, named RACHAMALLA. His minister of finance was named CHAMUNDA-RA'YA, who was remarkably devout in the performance of the religious duties of the *Jains*. It was reported to him, by a travelling merchant, that there was, in the city of *Padmanábh-pura*, an image of GÓMAT I'S'WARA SWA'MÍ. On hearing this relation, he made a vow, before all the people, not to drink milk, until he saw the image of GÓMAT I'S'WARA. When he retired from the public hall to his own apartments, he found his mother also disposed to follow the same resolution; and they both

* The abodes of deities of various classes.



View taken in the Court below.



View taken from the opposite Terrace above.

Drawings of the Gigantic Statue of **GOMUT ISWAR**, *at Billacull or Bellagolla. Taken in Dec.r 1801.*

The foot of the Statue is 9 common feet long, hence the height of the Statue is estimated at 54 feet at least. The figure represented at A is design'd to shew the comparative height of a man, standing on the opposite terrace near the Statue.

went immediately into the presence of SINVA'NANDA A'CHA'RYA, who was their sacred minister of religion, and acquainted him with the vow, and obtained his consent to the journey. Then setting off, with a moderate retinue of the four descriptions, (horse, foot, elephants and cars,) towards *Padmanábh-pura*, he halted at this village, during a few days, for refreshment; and being informed by the inhabitants, that there was a sacred temple of the *Jain* worship on the summit of *Chandragiri*, which was founded by CHANDRAGUPTA MAHA'RA'J, he there performed the customary ceremonies and worship. As he slept there on that night, the heavenly nymph CUSHMANDAMA appeared to him in a dream, and recommended to him to desist from his intended journey to *Padmanábh-pura*, as it was too distant; and to worship another image of GÓMAT I'S'WARA SWA'MÍ, eighteen times man's height, on the mountain of *Indragiri;* equal for miracles to the image that was in height fifty-two fathoms at *Padmanábh-pura*. To make the discovery, he was directed to shoot an arrow towards the south, and follow its flight; by this means he would discover the image, on the spot where that arrow should fall.

On the next morning, CHAMUNDARA'Y acted according to the advice given to him in his dream, and was extremely rejoiced at the discovery of that wonderful image. He afterwards fixed his residence on that spot for twenty years; and made the workmen cut it out into a regular shape, with the utmost accuracy of proportion in all its parts; the several proportions of the body resembling the original likeness of GÓMAT I'S'WARA SWA'MÍ, in profound contemplation, to obtain *Mócsha*. He also caused several buildings to be constructed, as temples and other edifices, round the God. On their completion, he established the worship of the image, as God, with great ceremony and devotion, in the year of the cycle *Vibhava*,

when 600 years were past of the *Cali-Yuga**. After he had placed the image, CHAMUNDARAY granted in gift, to the God, the lands situated on all sides of the place; to the value of 19,000 pagodas, for the performance of the daily sacred ceremonies, as well as those which return periodically.

Afterwards this kingdom was ruled by several *Rájás*, from the time of BALA'LRAY down to VISHNU-VARDD'HAN. In their reigns, the *Jains* added several buildings to the former work, and were allowed the enjoyment of the lands assigned to the God.

The successors of SINVA'NANDA A'CHARYA, who was *Guru* to CHAMUNDARAY, resided here, to manage the religious affairs of this place, and of other places of the *Jain* tribes. The present *Guru* at *Bélligola* is the regular successor, according to the following list of *Gurus*, from the last of the ancient twenty-four *Tírt'hacaras* in the fourth age, who was named VARDHAMA'NASWA'MÍ, and who attained beatitude (*Mócsha*) 2464 years before the year of the cycle *Durmati* (or A. D. 1801)†; at the time when SRE'-N'ICA-MAHA'RA'J, having ruled for the space of a hundred years, departed to heaven.

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* MAJOR MACKENZIE remarks the inconsistency of this with the subsequent computation of 2464 years. The *Cali-yuga* is not a mode of reckoning in use among the *Jainas*, though repeatedly mentioned in these papers. Perhaps the present or fifth age, according to their computation. may be here meant: it begins the fourth year after VARD'HAMA'NA's demise. H. T. C.

† I have been informed by *Jainas* in *Bengal* that they reckon VARD'HAMA'NA to have lived 580 years before the Era of VICRAMA'DITYA. H. T. C.

LIST OF THE NAMES OF THE GURUS,

From the last Tírt'hacara of Ancient Times, down to the present Guru.

VARD'HA'MANA SWA'MI',

The twenty-fourth Tírt'hacara of the last List.

1. GAUTAMA *, 2 SUDHARMA †, 3 JAMBÚNA'T'HA, 4 VÍRASE'N A'CHA'RYA ‡, 5 VRISHABHASE'N A'CHA'RYA, 6 SIDD'HASE'N A'CHA'RYA, 7 VÍRASE'N A'CHA'RYA, 8 SINVA'NAND A'CHA'RYA, 9 CUNDA CUND A'CHA'RYA, 10 GRĬDHRAPE'NCH A'CHA'RYA, 11 MAYÚRAPE'NCH A'CHA'RYA, 12 DHA'RASE'N A'CHA'RYA, 13 BAHUSE'N A'CHA'RYA, 14 CA'LIPARAME'S'WAR SWA'MÍ, 15 JINASE'N A'CHA'RYA, 16 GUNABHADR A'CHA'RYA, 17 AKALONKA SWA'MÍ, 18 VEEKALONKA SWA'MÍ, 19 ABHAYACHANDRA SIDD'HA'NT, 20 SRUTAMUNIVATA'RCA, 21 PUJYAPA'DA, 22 VIDYA'NA'T'HA, 23 JAYASE'NA, 24 AVÍRASE'NA, 25 LACSHMÍSE'NABA'LA'RCA, 26 CHA'RUCÍRTIPANDIT A'CHA'RYA, the present priest at *Bélligola:* his age is 65; and he arrived at his present rank 30 years ago.

CHAMUNDARA'Y, after having established the worship of this image, became proud and elated, at placing this God, by his own authority, at so vast an expense of money and labour. Soon after this, when he performed, in honour of the god, the ceremony of *Panchámrĭta Snána,* (or washing the image

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* Meaning VARD'HAMA'NA's eldest disciple, named INDRABHÚTI, and surnamed GAUTAMA, because he was of that family or *Gótra.* H. T. C.

† SUD'HARMA was one of VARD'HAMA'NA's disciples, and the only one who has left successors. H. T. C.

‡ The disciple and successor of JAMBUSWAMÍ, was PRABHAVA. The person, who furnished this list, has skipped from SUD'HARMA's disciple to some priest, who may have been his remote successor, at an interval of several hundred degrees. H. T. C.

with five liquids, milk, curds, butter, honey, and sugar;) vast quantities of these things were expended, in many hundred pots: but, through the wonderful power of the god, the liquor descended not lower than the navel, to check the pride and vanity of the worshipper. CHAMUNDARA'Y, not knowing the cause, was filled with grief, that his intention was frustrated of cleaning the image completely with this ablution. While he was in this situation, the celestial nymph PADMA'VATÍ, by order of God, having transformed herself into the likeness of an aged poor woman, appeared, holding in her hand the five *Amrĭtas*, in a *Bélliyágola*, (or small silver pot,) for washing the statue: and signified her intention to CHAMUNDARA'Y, who laughed at the absurdity of this proposal for accomplishing what it had not been in his power to effect. Out of curiosity, however, he permitted her to attempt it: when, to the great surprize of the beholders, she washed the image with the liquor brought in the little silver vase. CHAMUNDARA'Y, repenting his sinful arrogance, performed a second time, with profound respect, his ablution, on which they had formerly wasted so much valuable liquids; and washed completely the body of the image.

From that time, this place is named after the silver vase (or *Bélliyagola)* which was held in PADMA'VATÍ's hand. *Sravana (Sramaṅa)* is the title of a *Jain Sannyásí;* and, as this place is the principal residence of these *Sannyásís*, the people call it *Sravan-Bélligola.*

Many years after this period, a king, named BHATTAVARD'HAN, reigned at *Dwaratípattan;* which the people now call generally by the name of *Doragul*, or *Dorasamudram.* It is said, that he wanted a finger. One day, as he sat with his concubine (who was of the *Vaishnava* sect) upon the terrace of his palace, she observed, in the public street, a *Jain Sannyásí* passing, who avoided conversing with any person,

and was under a holy vow of abstaining from taking food in the house of any person who was lame, or deficient in any of the members of his body. Upon hearing of the vow which he had made, she asked the king, from motives of curiosity, "Behold your *Guru!* will he, at your request, eat food with you?" The *Rájá*, not recollecting the customs of the *Gurus*, replied "Why not? will he not come to the house of his own disciple? if he refuse at my request, I will abandon my sect, and bind myself to your command; but, if he comply, contrary to your expectation, you must conform to my sentiments." Then the *Rájá*, descending from the terrace, advanced to the *Guru*, and asked him to take food, walking, at the same time, round him, with closed hands, and pronouncing, three times successively, the following sacred form of words, according to the rules of their religion. "O Lord! reverence be to you! stay!—for BRAMARA'YAH's sake—comply!"—After he had used this prayer, he took water into his hands, to give to him, with the following form. "Adoration! O Lord!—Adoration! do purify this water!" But the *Swámí*, without speaking, retired to the temple; where he resolved to fast that day, as an expiation for being invited to eat by a maimed man.

BHATTAVARD'HAN, following his *Guru* to the temple, upon inquiry was informed of its being forbidden by their law: he then explained to the *Guru*, what had passed between him and his beloved mistress, and earnestly intreated the priest to comply with his request; declaring, that if it were refused, he must join the other sect, whence great misfortunes would befal their religion: the *Swámí* replied, that he would suffer death, or any other misfortune, rather than for the king's favor do what was contrary to the law.

Upon this refusal, BHATTAVARD'HAN, agreeably

to the commands of his mistress, whom he loved, joined her sect, which was that of the *Vaishnavas;* and, from that time, his name was changed from BHATTAVARD'HAN, to VISHNUVARD'HAN. This country was ruled, for many years, by his descendants. On the downfal of that dynasty of princes, their dominions were conquered by the kings of *Bijayanagar.*

After the *Rájás* of *Mysore* had obtained possession of this country, under the *Anégóndi* kings, they granted lands, of the amount of 1000 pagodas annually, to the god; and of the amount of 120 pagodas, to the college of *Sannyásís.* While their power lasted, they protected the *Jains* without permitting the intolerant spirit of other sects to disturb their religious ceremonies and duties. In the reign of CHICCA-DE'VARA'JA VADEYAR, a *Jain*, named ANNAYA CHETTY, constructed, at this place, the tank named *Calyáni.*

Formerly RA'MA'NUJA, the famous *Vaishnava* reformer, under the encouragement of the confusion which then prevailed in the government, came hither, with the vain desire of disputing with the *Jains*, about their laws and religion. After his conference with them, he had it proclaimed, that he had worsted the *Jains*, in their disputations on religion and law; and erected here a pillar, on which were inscribed the symbols of the *Sanc'ha* and *Chacra;* and, cutting off a small piece of the finger of the left hand of GÓMAT I'S'WAR SWA'MÍ, he departed.

Bélligola is the most revered place of the *Jain* worship above the *Ghats.* Here are two mountains; one called *Indragiri*, and the other, *Chandragiri:* the former is situated on the north-west, adjoining to the village: on its summit stands their famous image of GÓMAT I'S'WAR SWA'MÍ *, of the height of eighteen

* Plate 2.

fathoms, inclosed within a strong wall, with many small temples and other buildings. Here were, in former times, seventy-two well shaped images; of which there now remain, in good condition, only forty-two, placed in a gallery, under a portico, supported by pillars, which is carried inside, along the wall. They say, that these are images of their *Tír-t'hacars*, of the last, present, and future ages. The great image, being of too great height to be covered, is in the open air; appearing like a column on the hill, when viewed as far as eight *cós* on all sides.

On the other hill, called *Chandragiri*, close to the village, are several sacred temples; there are also many temples in the town. The *Sannyási* resides in a *Mat'ha* within the town; where are some images of stone and metal, for his domestic worship: in other places, he employs people to perform worship to them regularly. In the government of the *Mysore Rájás*, and of HAIDER NAYAC, certain villages were granted, in *Jagir*, to the god and the college. There are not any families of any other principal casts, excepting *Jains*, in the village of *Bétligola*.

At this place they used to celebrate, once a year, a great festival to the god. Two months before its commencement, the head of the *Mat'ha* used to send a written notice over the country, to announce the festival to all *Srávacs* or *Jains*. On the receipt of this paper, great numbers of this sect, even from *Hindustan*, came to attend the ceremony, and worship the god. This festival was neglected, for six or seven years, through the oppression of the late government; and has not yet been renewed; because their lands have been resumed, and included in the lands of government.

Translation of an Inscription, cut on a Stone, upon the Hill of Bélligola, in front of the Image.

'BE GOOD FOR ALL.'

BE success to the famous RA'MANU'JA *, who is lord above the lords of *Atit'his* or *Sannyásís;* who, like the mighty fire from the face of *Va'davánala*, disperses or dries up the water of the ocean of *Páshan'das*, or infidels; who is chief among the slaves of the Lily feet of *Srírangarája;* who allows a passage through *Vicunta*, ornamented with many edifices of precious stones.

In the year of the *Saca* 1290 †, in the *Cilaca* year of the cycle, on Thursday, the 10th of the month of *Bhádrapad*, be success and glory to the honourable monarch, the sovereign and destroyer of envious princes, lord of foreign kings, whose name is BUCCARA'YA. During his reign, on account of the disputes of the *Jains* and *Bhactas*, the principal citizens of the new city, or *Hasápattan*, of *Anégóndi*, of *Pémugóndá*, of *Caláhattí pattan*, and of other places, represented to the prince the injustice committed by the *Bhactas:* he assembled a court, composed of the following people: COVILA TIRAMALA, PE'RU COVILA TIRUMALA RAYANA, and other chief *A'chárya*s, judges, inhabitants, and other followers of the *T'iruman* and *Térubadi* marks, and the head people or chief officers of districts, and the *Vaishnavas* of *Tirucul* and *Jambavacul;* in which it was determined, that there was no real cause of difference between

* RA'MA'NUJA, the famous author of the *Sri-bhashya*, and reformer of the *Saiva* doctrine, was born A.D. 1008. The invocation to him shows, that the inscription was placed with the consent of government. C. M.

† A.D. 1367.

the *Jains* and *Vaishnavas*. The *Mahárája*, putting the hands of the *Jains* into the hands of the *Vaishnavas*, ordered that the *Jains* be permitted to use their former and usual great drums, as well as the *Calahans-nada*, which had been taken away by the *Bhactas;* and, for the performance of this, he ordered it to be made public, by inscriptions carved upon stones, in the *Jain* temples, all over the empire, that no distinction, or contradiction, appeared between the religion of the *Jains* and *Vaishnavas:* therefore the *Vaishnavas* should agree to protect them, while the sun and moon endure. TE'RUMATIA, and the other chief people, then resolved, in token of their good will, that all the *Jains*, who are inhabitants of the different divisions of the world, should contribute annually, at the rate of one fanam for each family, to defray the ceremonies of their god at *Bélligola Tírt'h*, and to repair the buildings of the *Jinálayas*, or temples of JINA.

By continuing the above yearly gift for this purpose, while the sun and moon remain, will be obtained the advantage of great reputation and grace. If any person refuse its execution, he shall go to the hell of those who betray their kings and holy religion; and he, who prevents this charity, shall incur the sin of killing a cow, or a *Brahmen*, on the bank of the *Gangá* river.

"Whoever resumes gifts, in money or lands, granted by himself or others, shall be born as an insect in dung, for sixty thousand years."

EXTRACTS OF A JOURNAL,

BY MAJOR C. MACKENZIE.

Feb. 24, 1797. NEAR *Calyani*. On arriving at *Mudgiri* several appearances, indicated a change in the country, viz. the style of building of the pagodas; as we here found them of the mosque kind, with domes and pillars in front; others in which the *Lingam* was worshipped of a large size: in the *Dêwal* of *Ramalingam*, one of them was a groupe of five *Lingams* *, and a great number of stones were placed round the temple, covered with sculptures. At a temple of *Hanumán* (the only one seen since we came into the *Canara* country,) were several sculptures, also placed round the building; in one, a god or hero carried a cocoa tree; another was drawing a bow; a hand, in one place, covers a horseman; and an inscription, in two columns, was surmounted by the sun, moon, *Lingam*, &c.

But that which most attracted my attention, was, close to the mud wall, a round temple of blue stone, with a portico of four pillars, curiously carved and ornamented: in the portal within, facing the north, was a figure, sitting cross-legged, naked, his head covered with curls, like the figure of BUDD'H; the nose was defaced, and a fracture run through the figure. The annexed sketch will give some idea of it †. A poor woman, near, said it was "the image of *Chindeo*, or *Jain-deo*." Without was a greater figure of the same kind, also apparently defaced

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* The five *Lingams*, signifying the powers of nature united in its five component elements, are sometimes seen in this form. C. M.

† Plate 4.

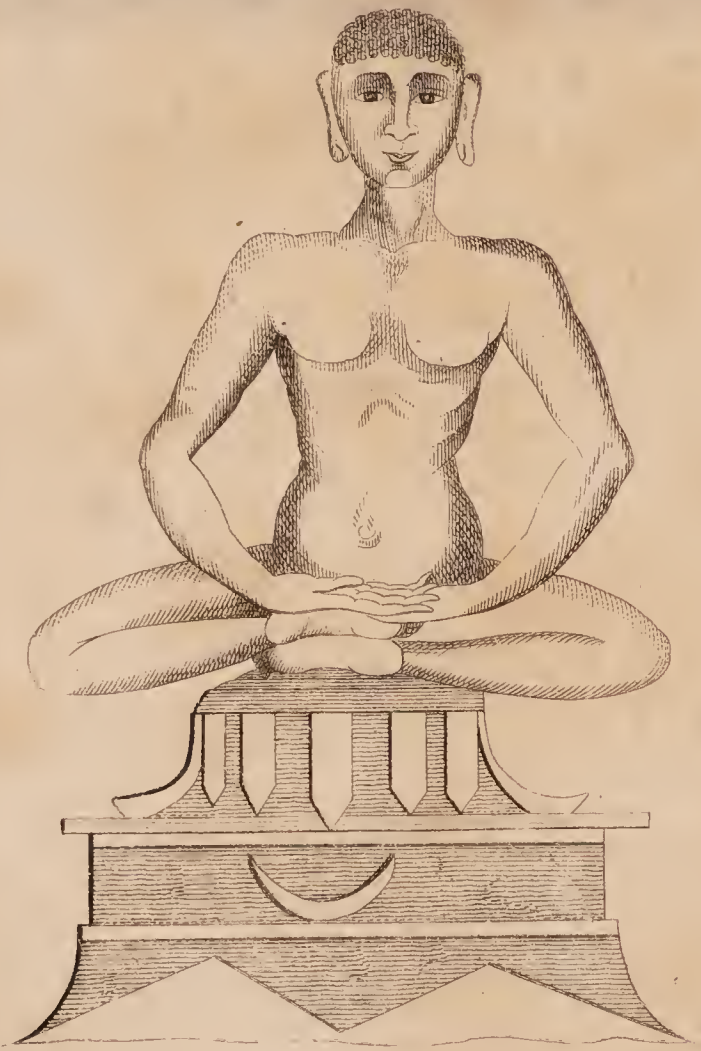


Image in the Jain Pagoda at Toomcoor

May 1800.

Statue dug up at Conjeveram supposed to belong to the Jain Worship

18th August 1799.

and neglected: and particularly, the several heads of snakes, which as a group shaded it, were mutilated. I could obtain no further information respecting it.

In consequence of notices received at *Ongole*, I determined to call at *Amrésvaram* to see the antiquities lately discovered there, as the place is near the banks of the *Crĭshna*, and we could reach the place whither our tents were to be sent early in the day. I therefore, dispatched my interpreter BORIA, accompanied by some *Bráhmens* and two *Sepahis*, in the evening to *Amrésvaram*, with directions to make some previous inquiries into the history of the place: and to conciliate the inhabitants; particularly the *Bráhmens*, who are apt to be alarmed on these occasions.

In the morning before day, we left *Ibrámpattan* by moon-light, and passed along the north bank of the *Crĭshna*. We observed, a few miles off, a dry but deep *cálava*, or canal, leading off from the river, probably intended for the purpose of cultivation. At day-light, we were in the sandy bed of the river, which seems to be nearly two miles wide, including the islands; and contains no water at present. We ascended the shallow bank to *Amrésvaram*. The temples appear to be new, and are said to have been recently built by the *Chintapelli Rájá*, who has fixed his chief residence here, since *Lacshmípuram* was occupied by our troops. A high mud square wall encloses the temples and his houses; and the rest of the place is laid in regular streets, at right angles, in the same manner with his other places of *Lacshmípuram*, &c. A street, going south from a gate of the temple, seems to be 200 feet wide; and an open *choultry* stands in the intersection of four principal streets. I found BORIA ready to receive me, attended by some *Bráhmens*; who said, that the people here

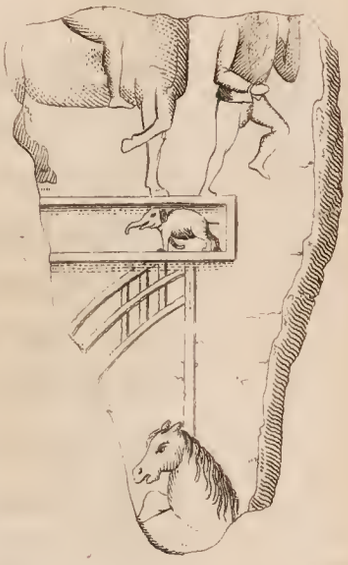
were rather surprised and alarmed at the approach of Europeans and *Sepahis*, until he assured them that our object was merely to view the lately discovered ruins. We were then conducted to those remains of antiquity. We found a circular trench, about 10 feet wide, dug about 12 feet deep, into a mass of masonry, composed of bricks of 16 inches square, and 4 inches thick. It is probable, that this body of masonry did not extend to a greater depth. The central area was still untouched; and a mass of rubbish was thrown outside of the ditch, which prevented any observation of its original state; but I conjecture that the whole had, previous to its opening, formed a solid circular mound. In this ditch, a white slab lay broken, which still exhibited some figures in relievo, of which Mr. Sydenham took a sketch. Against the outside of the trench, were placed three or four slabs, of the same colour, standing, but inclining inwards; on the inside, where these were uncovered, they had no figures, except where the top of one rose above the earth. Without, some sculptures appeared, which lead me to conclude that these sculptures were exposed on that side to view. From the inquiries of my *Bráhmens*, I could obtain no other account, than that this place was called *Dípál-dinna*, or the hill of lamps. The *Rájá*, about a year ago, had given orders to remove a large stone, to be carried to the new pagoda, which he was building, when they discovered the brick work, which induced them to dig up the rest for the buildings. The white stones were then brought to light, and unfortunately broken; at least we could perceive few of them; and though it was said that some were carried into the temple*, the *Bráhmen*, who was admitted, had perceived only some broken pieces. The sculptured stones observed, were as follows:

* Some of these have been discovered lately (1804) by Mr. William Brown, containing sculptures, inscriptions, &c. of which it is probable, that copies may be procured. C. M.

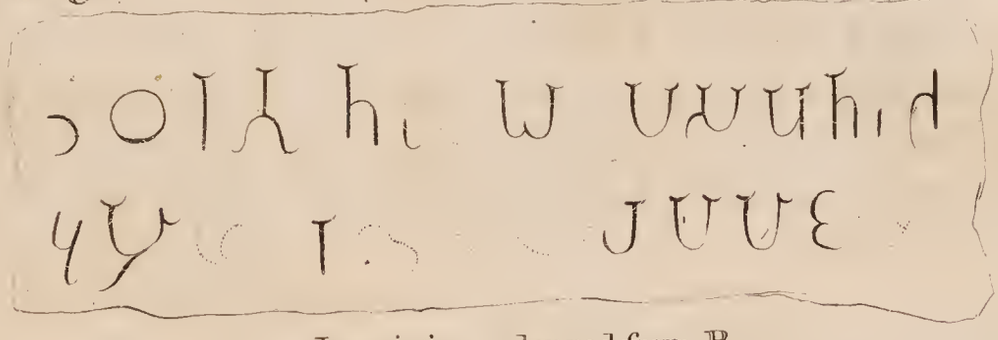
A

B

D

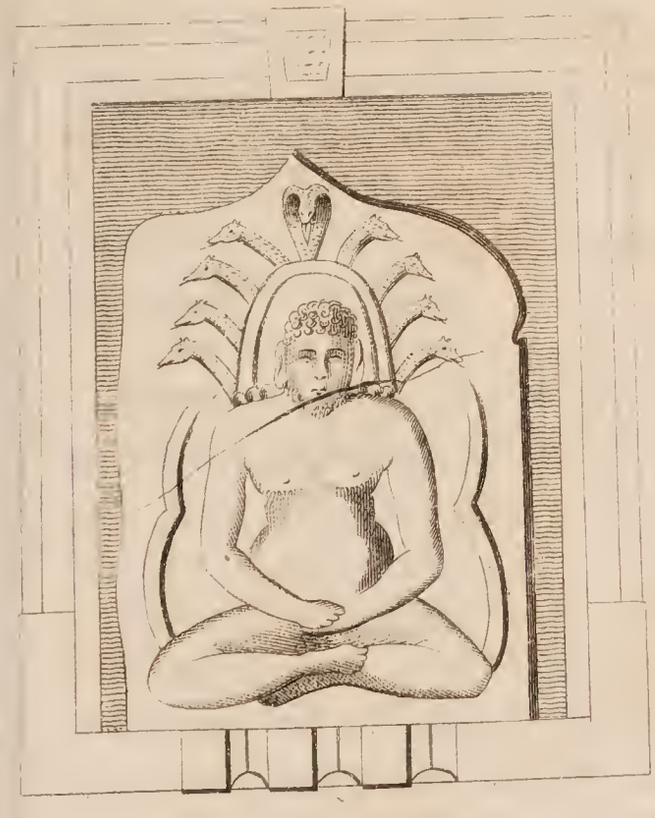


C C



Inscription enlarged from B

B B enlarged



B

JAIN-DEO

Mudgeery near Callianee

24th February 1797.

Fragments of

SCULPTURED STONES

dug up at Amarapoor *or*

Amrishvaram in Guntoor 179

A broken piece*, still lying in the ditch, or excavated foundation, on which appeared something like a *Lingam*, or a pillar, rising through what seemed shaped like a desk, but was probably designed for an altar; a male figure stood on the left, with its arms disposed as if pouring something on it; but as the upper part, and what he held, were broken off, this seems doubtful. Near him stood a female, holding a *Chambú*, or pot on her head, in the Hindu style. My *Bráhmen* naturally enough concluded, that this represented a female carrying water to assist in the offering to the *Lingam*. The feet of two figures remained on the right, which probably had appertained to two figures in the same attitude on that side. The stone was a white marble, called by the natives *Pálráyi*, or milk stone.

Near it stood three slabs, inclining inwards against the masonry, which had been dug out. On the side on which they were viewed, no figures were seen; and they were rough and unpolished: it is probable that they have sculptures on the side still covered with earth; and I have already mentioned, that some designs appeared at the top of one. If the whole of the circle was faced with these slabs, it is to be regretted, that this treasure of antiquity did not fall into better hands.

On the rubbish above, near these, and belonging to some unfortunately broken, were two pieces of the same white stone; one of these seemed divided into two compartments, by a border, on which three wild hogs running were sculptured: the outline is well designed. The leg of a figure sitting, and the hind leg of a horse appear above, remaining of the original design. Below the border, the plane was inclined to a lower border: and in the space of about 6 inches, two lines of characters were carved: on

* Plate 4, a.

cleaning off the dust, the first line appeared very legibly. I have to regret, that the approaching heat prevented my remaining, to copy this inscription in *fac-simile.* Some of the characters are, however, as I believe, faithfully given in the annexed attempt*; and I left a *Bráhmen* to transcribe the whole, but his copy was not satisfactory. In the place marked cc, some of the letters seem to resemble those of the *Ceylon* inscription. The other piece contained the head of a horse, and some defaced heads and prominent ornaments †.

Near the gate of the temple lay a slab, grey with the crust of ages; but of the same white marble. On it, five or six figures appeared, sitting in various attitudes, on what at first sight seemed to be *Lingams:* but upon close examination, their seats resembled our chairs.

The most curious and most complete piece of sculpture, we found as we returned along the high mud wall of the temple; laid as a roof, over a small temple of *Lingam,* of the same materials. It represented the attack and escalade of a fortified place. The principal figure, on an elephant (with the usual attendants, the driver and the fanner,) seemed issuing orders: before him, a pedestrian figure, with a round shield, seemed prostrating himself: a graceful figure at full length, stood close to the gate of a tower, fronting them. The tower, which was octangular, was surmounted by a rounded roof on pillars, of the shape of an *Ambari;* under which an archer was represented, in the act of drawing his bow, and shooting at an assailant, who covers himself with his shield, while mounting the rampart by a ladder: another figure, from behind the rampart, appeared peeping over, and covered by some defensive arms: several horsemen, and a man mounted on a bullock, seemed

* Plate 4, b, cc, bbb. † Ibid, d.

to support the attack. The town and rampart seem to be of stone, from the lines drawn obliquely to represent the perspective, which, however awkwardly done, was the first attempt of the kind I had observed in Indian sculpture. To whatever age this is to be attributed, we here find an escalade, defence by flanking towers, and their use, and the mode of attack and defence, illustrated by a Hindu sculpture.

When mention of these sculptures was first made to me at *Ongole*, it was hinted, that they contained marks of the worship of the *Jains**; but nothing of the kind appeared here. Without my mentioning the subject, I found that the same idea prevailed at this place, though my *Bráhmen* could give me no good reason for it; and the account which he received of the *Jains*, was very obscure: it was said that they were formerly a powerful people, who contested the sway with the *Bráhmens*.

On the lower part of the same slab, and divided by a border containing figures of animals, were sculptured four figures of men sitting on chairs, and reclining, in attitudes different from each other, but all significant of a graceful negligence, indicating careless ease. One of them had his hand disposed on his breast, or in the chain which hung from it; another seemed to incline to one side, leaning against his chair, with one leg and thigh thrown over the other; and wanted nothing but a *hooka* to be placed in his hand, to give a complete idea of that languid attitude, in which we sometimes see an Indian throw himself, when satiated with these fragrant steams that overpower and gratify the sense. The chairs were circular, of a cylindrical form, and the back forming half a circle. A number of small lines divided them longitudinally, and seemed to represent cane work. The thrones or seats represented in

* A figure cross legged has been since discovered on some of the sculptures found there. C. M.

other Hindu sculptures, I had never observed before with backs; so that these seem to have another origin. The figures were too small to admit of distinguishing ornaments: the head dress was round, and not raised so high as those commonly represented on stones.

On another stone, but uncertain whether belonging to these, was represented the remains of a god, or chief, sitting on a chair, and fanned by a female, holding a *choury*. It is well known, that Hindu princes, sitting in state, were generally thus attended. So CRISHNA RA'JA' is described, sitting on his royal throne, attended by two beautiful women, fanning him according to royal usage.

A horse on another stone, is preceded by a human figure in a flying attitude, remarkable for its graceful outline; but the upper part of both is destroyed.

The legs of all the figures are more slender and gracefully disposed, than I have observed in any other Hindu figures; nor have they that drapery, which usually marks with rigid observance their costume. Another remarkable trait is the vast number of rings about the feet, resembling those worn by the *lombâ'di* or *benjarí* women. None are observed on the toes or arms.

After all, though this differ widely from the carvings observed on Hindu buildings, it would be rash to draw any conclusion, until an opportunity offers of observing more sculptures collected. A correct drawing of the complete slab, over the temple of *Mahadéo*, would be extremely desirable, and a complete section across the area of *Dípál-dínna* would perhaps exhibit more remains.

I was disappointed in not finding any thing like the figure of *Jaindeo*, which I had seen at *Calyani*.

PARTICULARS OF THE JAINS.

EXTRACTED FROM A JOURNAL

BY DOCTOR F. BUCHANAN,

During Travels in Canara.

HAVING invited PANDITA 'ACHA'RYA SWA'MI, the *Guru* of the *Jains*, to visit me, he came, attended by his most intelligent disciples, and gave me the following account of his sect.

The proper name of the sect is *Arhata;* and they acknowledge that they are one of the twenty-one sects, considered as heretical by 'SANCARA 'ACHA'RYA. Like other *Hindus*, they are divided into *Bráhmen*, *Cshatriya*, *Vaisya*, and *Súdra*. These casts cannot intermarry together; but a man of high cast is not disgraced by having connection with a woman of a lower one, provided she be of pure descent. A similar indulgence is not granted to the women of the higher casts. The men are allowed a plurality of wives, which they must marry before the age of puberty. The man and woman must not be of the same family in the male line. Widows ought not to burn themselves with the bodies of their husbands; but those of the *'Súdra* only are permitted to take a second husband. The *Bráhmens* and *Vaisyas* in *Tulava*, and every cast above the *Ghâts*, consider their own children as their heirs; but the *Rájás* and *Súdras* of *Tulava*, being possessors of land, follow the custom of the country; and their heirs are their sister's children. Not even the *Súdras* are permitted to eat animal food, or to drink spirituous liquors: nor is it lawful for any one to kill an animal, except for the *Cshatriya* when engaged in war. They all burn the dead.

The *A'rhatas* reject the *Védas* and eighteen *Puráńas* of the other *Bráhmens*, as heretical. They say, that these books were composed by a *Rĭshi* named VYA'SA, whom the other *Bráhmens* consider as an incarnation of the deity. The chief book, of which the doctrine is followed by the *A'rhatas*, is named *Yóga*. It is written in the *Sanscrit* language, and character of *Carnáta;* and is explained by twenty-four *Puráńas*, all written by its author, who was named VRĬSHABHA SAYANA, a *Rĭshi*, who had obtained a knowledge of divine things, by long continued prayer. They admit, that all *Bráhmens* are by birth of equal rank; and are willing to show their books to the *Bráhmens* who heretically follow the doctrine of the *Védas;* but they will not allow any of the lower classes to look upon their sacred writings.

The gods of the *A'rhatas* are the spirits of perfect men; who, owing to their great virtue, have become exempt from all change and misfortune; and are all of equal rank and power. They are called collectively by various titles, such as *Jinéswara*, *A'rhat*, and *Sidd'ha;* but each is called by a particular name, or names; for many of them have above a thousand appellations. These *Sidd'has* reside in a heaven, called *Mócsha;* and it is by their worship only, that future happiness can be obtained. The first person, who by his virtue arrived at this elevated station, was A'DIPARAME'SWARA; and by worshipping him, the favour of all the *Sidd'has* may be procured. He has a thousand and eight names, the most common of which, amongst his adorers, is *Jinéswara*, or God.

The servants of the *Sidd'has* are *Dévatás*, or the spirits of good and great men; who, although not so perfect as to obtain an exemption from all future change, yet live in an inferior heaven, called *Swarga;* where, for a certain length of time, they enjoy great

power and happiness; according to the merit of the good works, which they performed, when living as men. *Swarga* is situated higher in the regions of the air than the summit of Mount *Méru*, and its inhabitants ought to be worshipped by men, as they possess the power of bestowing temporal blessings. Concerning the great gods of the *Védas*, the *Arhatas* say, that VISHNU was a *Rájá*, who having performed certain good works, was again born a *Rájá*, of the name of *Ráma*. At first he was a great hero and conqueror; but afterwards he retired from the pleasures of the world, became a *Sannyási*, and lived a life of such purity, that he obtained *Sidd'hi* (beatitude,) under the name of *Jina*, which he had assumed, when he gave up his earthly kingdom*. MAHE'SWARA or SIVA, and BRAHMA', are at present *Dévatás;* but are inferior in rank and power to INDRA, who is the chief of all the happy beings, that reside in *Swarga*. In this heaven are sixteen stages, containing so many different kinds of *Dévatás*, who live in a degree of bliss in proportion to their elevation. An inferior kind of *Dévatás*, called *Vyantaras*, live on mount *Méru;* but their power and happiness are greatly inferior to those of the *Dévatás* of *Swarga*. The various *Sactis*, are *Vyantaras*, living on *Mahá-Méru;* but they are of a malevolent disposition.

Below *Mahá-Méru*, and the earth, is situated *Bhuvana*, or hell; the residence of the spirits of wicked men. These are called *Racshas* and *Asuras*, and are miserable, although endowed with great power. *Bhuvana* is divided into ten places of punishment, which are severe in proportion to the crimes of their respective inhabitants.

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* I am informed, that the *Jains* have a legendary history of RA'MACHANDRA, which is termed *Padmapurána*, and is quite distinct from the *Purána* received under that title by the orthodox *Hindus*. H. T. C.

The heavens and earth in general, including *Mahá-Méru* and *Bhuvana*, are supposed never to have been created, and to be eternal; but this portion of the earth, *Árya* or *Bharata*, is liable to destruction and renovation. It is destroyed by a poisonous wind, that kills every thing; after which a shower of fire consumes the whole *Cánda*. It is again restored by a shower of butter, followed by one of milk, and that by one of the juice of sugar-cane. Men and animals then come from the other five *Cándas* of the earth, and inhabit the new *Árya* or *Bharatacánda*. The books of the *Árhatas* mention many *Dwípas*, surrounding *Mahá-Méru*, of which the one we inhabit is called *Jambú Dwípa*. People from this can go as far as *Manushóttara*, a mountain in the middle of *Pushcara-Dwípa*, between which and *Jambú-Dwípa* are two seas, and an island named *Dhatucí*. *Jambú-Dwípa* is divided into six *Cándas*, and not into nine, as is done by the *Bráhmens* who follow the *Védas*. The inhabitants of five of the *Cándas* are called *Mléch'has* or barbarians. *Árya* or *Bharatacánda* is divided into fifty-six *Désas* or provinces *, as is done by the other *Bráhmens*. As *Arabia* and *China* form two of these *Désas*, *Árya* would seem to include all the world, that was tolerably known to the *Arhatas*, who composed the books of this sect.

Every animal, from INDRA down to the meanest insect, or the most wicked *Racsha*, has existed from all eternity; and will continue to undergo changes, from a higher to a lower rank, or from a lower to a higher dignity, according to the nature of its actions, till at length it becomes perfect, and obtains a place among the *Sidd'has*. A *Súdra* must be born as one of the three higher casts, before he can hope for this exemption from evil; but, in order to become a *Bráh-*

* Perhaps the 56 *Antara-dwipas* are meant. H. T. C.

ANCIENT
Sculpture and Inscription
at
SRAVANGOODY,
(characters unknown)
near Madagusee.

October 1801.

NB. As a Jain Pagoda was here formerly it is probable these Inscriptions there may have some connexion with the Jain Antiquities.

men, it is not necessary, that he should be purified by being born of a cow, as many of the followers of the *Védas* pretend. The *A'rhatas*, however allow, that to kill an animal of the cow kind is equally sinful with the murder of one of the human species. The death of any other animal, although a crime, is not of so atrocious a nature. The *A'rhatas*, of course, never offer sacrifice, but worship the gods and *Dévatás*, by prayer, and offerings of flowers, fruits, and incense.

The *A'rhatas* are frequently confounded, by the *Bráhmens* who follow the *Védas*, with the *Saugatas*, or worshippers of BUDD'HA; but this arises from the pride of ignorance. So far are the *A'rhatas* from acknowledging BUDD'HA as their teacher, that they do not think he is now even a *Dévatá*; but allege, that he is undergoing various low metamorphoses, as a punishment for his errors. Their doctrine, however, it must be observed, has in many points a strong resemblance to that taught by the followers of BUDD'HA.

The *Jain Bráhmens* are all *Vaidya*, and dress like the others, who follow the doctrine of the *Védas*. They have *Gurus*, who are all *Sannyásís*; that is to say, have relinquished the world, and all carnal pleasures. These *Gurus*, in general, acknowledge, as their superior, the one who lives at *Sravana Bélligola*, near *Seringapatam* *: but PANDITA A'CHARYA SWA'MÍ pretends to be at least his equal. In each *Mat'ha* there is only one *Sannyásí*; who, when he is near death gives the proper instruction to one of his followers, who must relinquish the world and all its enjoyments, except perhaps an indulgence in the pride of devotion. The office is not confined to the

* Within four miles of *Chinráy-pattan*.

Bráhmens; none but the *Súdras* are excluded from this highest of dignities; for all the *Sannyásís*, after death, are supposed to become *Sidd'ha;* and of course do not worship the *Dévatás*, who are greatly their inferiors. The *Sannyásís* never shave, but pull out all their hair by the roots. They never wear a turban; and are allowed to eat and drink but once a day. In fact, they are very abstemious; and the old SWA'MÍ, who, from his infirmities, expected soon to become a god, mortified the flesh exceedingly. The *Gurus* have the power of fining all their followers, who cheat or lie, or who commit murder and adultery. The fines are given to the god; that is to his priest. These *Gurus* excommunicate all those who eat animal food, or fornicate with persons who are not *Jains;* which, of course, are looked upon as greater crimes than those that are only punished by fine. The married *Bráhmens* act as priests for the gods, and as *Puróhitas* for the inferior casts. The follower may choose any *Bráhmen* he pleases, for his *Puróhita*. The *Bráhmen* receives alms; and reads prayers on the occasion; as he does also at the marriages, funerals, and commemorations of the deceased ancestors of his followers.

The *Jains* are spread all over *India;* but at present are not numerous any where, except in *Tulava*. They alledge, that formerly they extended over the whole of *A'rya* or *Bharatacanda;* and that all those, who had any just pretensions to be of *Cshatriya* descent, were of their sect. It no doubt appears clear, that, in the south of *India*, many powerful princes were their followers, till the time of RA'MA'NUJA A'CHA'RYA. They say, that, formerly they were very numerous in *Arabia;* but that, about 2500 years ago, a terrible persecution took place, at *Mecca*, by orders of a king named PA'RSWA BHAT'TA'RACA, which forced great numbers to come to this country. Their ideas of history and chronology, however, as usual with *Bráh-*

mens, are so very confused, that they suppose PA'RSWA BHAT'TARACA to have been the founder of the Muhammedan faith. None of them have the smallest trace of the Arabian features; but are in every respect entirely *Hindus*.

There are two kinds of temples among the *Jains*; one covered with a roof, and called *Basti*; and the other an open area surrounded by a wall, and called *Bettu*, which signifies a hill. The temples of SIVA and VISHNU, the great gods of the followers of the *Védas*, are called here *Gadies*. In the *Bastis* are here worshipped the images of twenty-four persons, who have obtained *Sidd'hi*, or become gods. These images are all naked, and exactly of the same form; but they are called by different names, according to the person, whom they are meant to represent. These idols are in the form of a man sitting. In the temples called *Bettu*, the only image of a *Sidd'ha*, is that of a person called GÓMATA RA'JA, who, while on earth, was a powerful king. The images of GÓMATA RA'JA are naked, and always of a colossal size. That, which is at *Kurcul**, is made of one piece of granite, the extreme dimensions of which, above ground, are 38 feet in height, $10\frac{1}{3}$ feet in breadth, and 10 feet in thickness. How much is below ground, I cannot say; but it is probably sunk at least three feet, as it has no lateral support. According to an inscription on the stone itself, it was made by VÍRA-PANDIA, son of BHAIRAVE'NDRA, 369 years ago.

The *Jains* deny the creation of man, as well as of the world. They allow, that BRAHMA' was the son of a king, and that he is a *Dévatá*; and the favourite servant of GÓMATA RA'YA; but they altogether deny his creative power. BRAHMA', and the other *Dévatás*, are worshipped, as I have said, by the *Jains*, who

* *Cercal.* RENNEL's map, (U. I.)

have not become *Sannyásis;* but all the images of these supposed beings, that are to be found in the *Bastis*, or *Bettus*, are represented in a posture of adoration, worshipping the *Sidd'ha* to whom the temple is dedicated. These images, however, of the *Dévatás*, are not objects of worship, but merely ornamental; and the deity has not been induced to reside in the stone by the powerful invocations of a *Bráhmen*. When a *Jain* wishes to adore one of these inferior spirits, he goes to the temple dedicated to its peculiar worship. RA'MA is never represented by an idol in a *Basti*, although he is acknowledged to be a *Sidd'ha:* and, although GAN'ESA and HANUMA'N are acknowledged to be *Dévatás*, these favourites of the followers of the *Védas* have no images in the temples of the *A'rhatas*.

The *Jains* have no tradition of a great deluge, that destroyed a large proportion of the inhabitants of the earth; but they believe, that occasionally most of the people of *A'rya* are destroyed by a shower of fire. Some have always escaped to the other *Cándas*, and have returned to re-people their native country, after it has been renovated by showers of butter, milk, and the juice of the sugar-cane. The accounts of the world, and the various changes, which the *Jains* suppose it to have undergone, are contained in a book called *Lóca Swarupa*. An account of GÓMATA-RA'YA is given in a book called *Gómata Ráya Cheritra*. The *Camunda Ráya Purána* contains a history of the twenty-four *Sidd'has* worshipped in the *Bastis*.

V.

OBSERVATIONS ON THE SECT OF JAINS,

BY H. T. COLEBROOKE, ESQ.

THE information collected by MAJOR MACKENZIE, concerning a religious sect hitherto so imperfectly known, as that of the *Jainas*, and which has been even confounded with one more numerous and more widely spread (the sect of BUDD'HA), may furnish the ground of further researches, from which an exact knowledge of the tenets and practice of a very remarkable order of people, may be ultimately expected. What MAJOR MACKENZIE has communicated to the society, comes from a most authentic source; the declarations of two principal priests of the *Jainas* themselves. It is supported by similar information, procured from a like source, by DR. F. BUCHANAN, during his journey in *Mysore*, in the year following the reduction of *Seringapatam*. Having the permission of DR. BUCHANAN, to use the extracts, which I had his leave to make from the journal kept by him during that journey; I have inserted, in the preceding article, the information received by him from priests of the *Jaina* sect.

I am enabled to corroborate both statements, from conversation with *Jaina* priests, and from books, in my possession, written by authors of the *Jaina* persuasion. Some of those volumes were procured for me at *Benares;* others were obtained from the present JAGAT-S'E'T, at *Morshedabad*, who, having changed his religion, to adopt the worship of VISH-

N'U, forwarded to me, at my request, such books of his former faith, as were yet within his reach.

It appears, from the concurrent result of all the inquiries which have been made, that the *Jainas* constitute a sect of *Hindus*, differing, indeed, from the rest, in some very important tenets; but following, in other respects, a similar practice, and maintaining like opinions and observances.

The essential character of the *Hindu* institutions is the distribution of the people into four great tribes. This is considered by themselves to be the marked point which separates them from *Mléch'has* or Barbarians. The *Jainas*, it is found, admit the same division into four tribes, and perform like religious ceremonies, termed *Sanscáras*, from the birth of a male to his marriage. They observe similar fasts, and practise, still more strictly, the received maxims for refraining from injury to any sentient being. They appear to recognise, as subordinate deities, some, if not all, of the gods of the prevailing sects; but do not worship, in particular, the five principal gods of those sects; or any one of them by preference; nor address prayers, or perform sacrifice, to the sun, or to fire: and they differ from the rest of the *Hindus*, in assigning the highest place to certain deified saints, who, according to their creed, have successively become superior gods. Another point, in which they materially disagree, is the rejection of the *Védas*, the divine authority of which they deny; condemning, at the same time, the practice of sacrifices, and the other ceremonies, which the followers of the *Védas* perform, to obtain specific promised consequences, in this world, or in the next.

In this respect, the *Jainas* resemble the *Baudd'has* or *Saugatas*, who equally deny the divine authority of the *Védas*; and who similarly worship certain preeminent saints, admitting likewise, as subordinate dei-

ties, nearly the whole pantheon of the orthodox *Hindus*. They differ, indeed, in regard to the history of the personages, whom they have deified; and it may be hence concluded, that they have had distinct founders; but the original notion seems to have been the same. In fact, this remarkable tenet, from which the *Jainas* and *Baudd'has* derive their most conspicuous peculiarities, is not entirely unknown to the orthodox *Hindus*. The followers of the *Védas*, according to the theology, which is explained in the *Védánta*, considering the human soul as a portion of the divine and universal mind, believe, that it is capable of perfect union with the divine essence: and the writers on the *Védánta* not only affirm, that this union and identity are attained through a knowledge of God, as by them taught; but have hinted, that by such means the particular soul becomes God, even to the actual attainment of supremacy *.

So far the followers of the *Védas* do not virtually disagree with the *Jainas* and *Baudd'has*. But they have not, like those sects, framed a mythology upon the supposed history of the persons, who have successively attained divinity; nor have they taken these for the objects of national worship. All three sects agree in their belief of transmigration. But the *Jainas* are distinguished from the rest by their admission of no opinions, as they themselves affirm, which are not founded on perception, or on proof drawn from that, or from testimony.

It does not, however, appear, that they really withhold belief from pretended revelations: and the doctrines, which characterise the sect, are not confined to a single tenet; but form an assemblage of mytholo-

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* *Vrihad áran'yaca Upanishad.*

gical and metaphysical ideas found among other sects, joined to many visionary and fantastic notions of their own.

Their belief in the eternity of matter, and perpetuity of the world, is common to the *Sánc'hya* philosophy, from which it was perhaps immediately taken. Their description of the world has much analogy to that which is given in the *Puránas*, or Indian theogonies: but the scheme has been rendered still more extravagant. Their precaution to avoid injuring any being is a practice inculcated in the orthodox religion, but which has been carried by them to a ludicrous extreme *.

In their notions of the soul, and of its union with body, and of retribution for good and evil, some analogy is likewise observable. The *Jainas* conceive the soul *(Jíva)* to have been eternally united to a very subtil material body, or rather to two such bodies, one of which is invariable, and consists (if I rightly apprehend their metaphysical notions) of the powers of the mind; the other is variable, and is composed of its passions and affections: (this, at least, is what I understand them to mean by the *Taijasa* and *Cármana Saríras*). The soul, so embodied, becomes, in its successive transmigrations, united with a grosser body denominated *Audárica*, which retains a definite form, as man and other mundane beings; or it is joined with a purer essence varying in its appearance at pleasure, as the gods and genii. This last is termed *Vaicárica*. They distinguish a fifth sort of body, under the name of *Aháraca*, which they explain as a minute form, issuing from the head of a meditative sage, to consult an omniscient saint; and returning with the desired information to the person whence

* *Jaina* Priests usually bear a broom adapted to sweep insects out of their way; lest they should tread on the minutest being.

that form issued, or rather from which it was elongated; for they suppose the communication not to have been interrupted.

The soul is never completely separated from matter, until it obtain a final release from corporeal sufferance, by deification, through a perfect disengagement from good and evil, in the person of a beatified saint. Intermediately it receives retribution for the benefits or injuries ascribable to it in its actual or precedent state, according to a strict principle of retaliation, receiving pleasure or pain from the same individual, who, in a present or former state, was either benefited or aggrieved.

Major Mackenzie's information confirms that, which I had also received, concerning the distribution of these sectaries into clergy and laity. In *Hindustan* the *Jainas* are usually called *Syauras;* but distinguish themselves into *Srávacás* and *Yatis*. The laity (termed *Srávaca*) includes persons of various tribes, as indeed is the case with *Hindus* of other sects: but, on this side of India, the *Jainas* are mostly of the *Vaisya* class *. The orthodox *Hindus* have a secular, as well as a regular, clergy: a *Bráhman'a*, following the practice of officiating at the ceremonies of his religion, without quitting the order of a householder, may be considered as belonging to the secular clergy; one who follows a worldly profession, (that of husbandry for example,) appertains to the laity; and so do people of other tribes: but persons, who have passed into the several orders of devotion, may be reckoned to constitute the regular clergy. The *Jainas* have, in like manner, priests who have entered into an order of devotion; and also employ

* I understand that their *Vaisya* class includes eight-four tribes: of whom the most common are those denominated *O'swál, Agarwál, Pariwár,* and *C'handéwál.*

Bráhmanas at their ceremonies; and, for want of *Brahmanas* of their own faith, they even have recourse to the secular clergy of the orthodox sect. This subject is sufficiently explained by MAJOR MACKENZIE and DR. BUCHANAN; I shall, however, add, for the sake of a subsequent remark, that the *Jainas* apply the terms *Yatí* and *Sramańa*, (in *Prácrit* and *Hindí* written *Samana*,) to a person who has devoted himself to religious contemplation and austerity; and the sect of BUDD'HA uses the word *Sramańa* for the same meaning. It cannot be doubted, that the *Sommonacodom* of *Siam* is merely a corruption of the words *Sramańa Gautama*, the holy GAUTAMA or BUDD'HA *.

Having been here led to a comparison of the Indian sects which follow the precepts of the *Védas*, with those which reject their authority, I judge it necessary to notice an opinion, which has been advanced, on the relative antiquity of those religions; and especially the asserted priority of the *Baudd'has* before the *Bráhmanas*.

In the first place, it may be proper to remark, that the earliest accounts of India, by the Greeks who visited the country, describe its inhabitants as distributed into separate tribes †. Consequently a sect which, like the modern *Baudd'has*, has no distinction of cast, could not have been then the most prevalent in *India*.

It is indeed possible that the followers of BUDD'HA may, like the *Jainas*, have retained the distribution into four tribes, so long as they continued in *Hindustan*.

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* See As. Res. vol. 7, p. 415.

† Seven tribes are enumerated: but it is not difficult to reconcile the distinctions which are stated by ARRIAN and STRABO, with the present distribution into four classes.

But in that case, they must have been a sect of *Hindus;* and the question, which is most ancient, the *Bráhmana* or the *Baudd'ha*, becomes a solecism.

If it be admitted that the *Baudd'has* are originally a sect of *Hindus*, it may be next questioned whether that, or any of the religious systems now established, be the most ancient. I have, on a former occasion*, indicated the notions which I entertain on this point. According to the hypothesis which I then hinted, the earliest Indian sect, of which we have any present distinct knowledge, is that of the followers of the practical *Védas*, who worshipped the sun, fire, and the elements; and who believed the efficacy of sacrifices, for the accomplishment of present and of future purposes. It may be supposed that the refined doctrine of the *Védántís*, or followers of the theological and argumentative part of the *Védas*, is of later date: and it does not seem improbable that the sects of *Jina* and of *Budd'ha* are still more modern. But I apprehend that the *Vaishnavas*, meaning particularly the worshippers of RA'MA and of CRĬSH'NA †, may be

* As. Res. vol. 8, p. 474.

† In explanation of a remark contained in a former essay (As. Res. vol. 8, p. 475), I take this occasion of adding, that the mere mention of RA'MA or of CRISHN'A, in a passage of the *Védas*, without any indication of peculiar reverence, would not authorize a presumption against the genuineness of that passage, on my hypothesis; nor, admitting its authenticity, furnish an argument against that system. I suppose both heroes to have been known characters in ancient fabulous history; but conjecture, that, on the same basis, new fables have been constructed, elevating those personages to the rank of gods. On this supposition, the simple mention of them in genuine portions of the *Védas*, particularly in that part of it which is entitled *Bràhman'a*, would not appear surprising. Accordingly, CRISHN'A, son of DE'VACÍ, is actually named in the *Ch'handógya Upanishad* (towards the close of the 3d Chapter,) as having received theological information from GHÓRA a descendant of ANGIRAS. This passage, which had escaped my notice, was indicated to me by MR. SPEKE, from the Persian translation of the *Upanishad*.

subsequent to those sects, and that the *Saivas* also, are of more recent date.

I state it as an hypothesis, because I am not at present able to support the whole of this position on grounds which may appear quite satisfactory to others; nor by evidence which may entirely convince them. Some arguments will, however, be advanced, to show that the supposition is not gratuitous.

The long sought history of *Cáshmír*, which, in the original *Sanscrit*, was presented to the emperor Acber, as related by Abul-fazil in the *Ayín Acberí* *, and of which a Persian translation exists, more ample than Abul-fazil's brief abstract, has been at length recovered in the original language †. A fuller account of this book will be hereafter submitted to the society: the present occasion for the mention of it, is a passage which was cited by Dr. Buchanan ‡, from the English translation of the *Ayín Acberí*, for an import which is not supported by the Persian or *Sanscrit* text.

The author, after briefly noticing the colony established in *Cáshmír* by Cas'yapa, and hinting a succession of kings to the time of the *Curus* and *Pándavas*, opens his detailed history, and list of princes, with Gónanda, a contemporary of Yud'hisht'hira. He describes Asóca (who was 12th in succession from Gónanda,) and his son Jalóca, and grandson Damódara, as devout worshippers of Síva; and Jalóca, in particular, as a conqueror of the *Mlech'has*, or barbarians. Damódara, according to this history, was succeeded by three kings of

* Vol. 2. p. 178.

† The copy which I possess, belonged to a *Bráhmana* who died some months ago (1805) in *Calcutta*. I obtained it from his heirs.

‡ As. Res. Vol. VI. p. 165.

the race of *Turushca;* and they were followed by a *Bód'hisatwa*, who wrested the empire from them by the aid of SA'CYASINHA, and introduced the religion of BUDD'HA into *Cáshmír*. He reigned a hundred years; and the next sovereign was ABHIMANYA, who destroyed the *Baudd'has*, and re-established the doctrines of the *Nílapurána*. This account is so far from proving the priority of the *Baudd'has*, that it directly avers the contrary.

From the legendary tales concerning the last BUDD'HA, current in all the countries, in which his sect now flourishes*; and upon the authority of a life of BUDD'HA in the *Sanscrit* language, under the title of *Lalita purána*, which was procured by MAJOR KNOX, during his public mission in *Népál*, it can be affirmed, that the story of GAUTAMA BUDD'HA has been engrafted on the heroic history of the lunar and solar races, received by the orthodox *Hindus:* an evident sign, that his sect is subsequent to that, in which this fabulous history is original.

The same remark is applicable to the *Jainas*, with whom the legendary story of their saints also seems to be engrafted on the *Pauranic* tales of the orthodox sect. Sufficient indication of this will appear, in the passages which will be subsequently cited from the writings of the *Jainas*.

Considerable weight might be allowed to an argument deduced from the aggravated extravagance of the fictions admitted by the sects of JINA and BUDD'HA. The mythology of the orthodox *Hindus*, their present chronology adapted to astronomical periods, their legendary tales, their mystical allegories, are abundantly extravagant. But the *Jainas* and

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* Relation d'un voyage. *Tachaud. Laloubere*, Royaume de *Siam*.

Baudd'has surpass them in monstrous exaggerations of the same kind. In this rivalship of absurd fiction, it would not be unreasonable to pronounce that to be most modern, which has outgone the rest.

The greater antiquity of the religion of the *Védas* is also rendered probable, from the prevalence of a similar worship of the sun and of fire in ancient *Persia*. Nothing forbids the supposition, that a religious worship, which was there established in times of antiquity, may have also existed from a remote period in the country between the *Ganges* and the *Indus*.

The testimony of the *Greeks* preponderates greatly for the early prevalence of the sect, from which the present orthodox *Hindus* are derived. ARRIAN, having said that the *Brachmanes* were the sages or learned among the Indians *, mentions them under the latter designation (σοφισαι) as a distinct tribe, 'which, though inferior to the others in number, is superior in rank and estimation: bound to no bodily work, nor contributing any thing from labour to the public use: in short, no duty is imposed on that tribe, but that of sacrificing to the gods for the common benefit of the Indians; and, when any one celebrates a private sacrifice, a person of that class becomes his guide; as if the sacrifices would not else be acceptable to the gods †.'

Here, as well as in the sequel of the passage, the priests of a religion consonant to the *Védas*, are well described: and what is said, is suitable to them; but

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* Καὶ των Βραχμάνων ὅι δὴ σοφισαὶ τοῖς Ἰνδοῖς εἰσὶν. κ. τ. λ. lib. 6.

† Νενέμηται οἱ πάντες Ἰνδοὶ εἰς ἑπτὰ μάλιστα γενεάς· ἐν μὲν αὐλοῖσιν οἱ Σοφισαὶ εἰσὶ, κ. τ. λ. Arrian in Indicis.

to no other sect, which is known to have at any time prevailed in *India*.

A similar description is more succinctly given by STRABO. 'It is said, that the Indian multitude is divided into seven classes; and that the philosophers are first in rank, but fewest in number. They are employed, respectively, for private benefit, by those who are sacrificing or worshipping, &c *.'

In another place he states, on the authority of MEGASTHENES, 'two classes of philosophers or priests; the *Brachmanes* and *Germanes:* but the *Brachmanes* are best esteemed, because they are most consistent in their doctrine †.' The author then proceeds to describe their manners and opinions: the whole passage is highly deserving of attention, and will be found, on consideration, to be more suitable to the orthodox *Hindus*, than to the *Baudd'has* or *Jainas:* particularly towards the close of his account of the *Brachmanes*, where he says, 'In many things they agree with the *Greeks;* for they affirm, that the world was produced and is perishable; and that it is spherical: that God, governing it as well as framing it, pervades the whole: that the principles of all things are various; but water is the principle of the construction of the world: that, besides the four elements, there is a fifth nature, whence heaven and the stars: that the earth is placed in the centre of all. Such and many other things are affirmed of reproduction, and of the soul. Like PLATO, they devise fables concerning the immortality of the soul,

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* Φησὶ δὴ τὸ τῶν Ἰνδῶν πλῆθος εἰς ἑπτὰ μέρη διηρῆσθαι, καὶ πρώτους μὲν τους φιλοσόφους εἶναι. κ. τ. λ. lib. 15.

† Ἄλλην δὲ διαίρεσιν ποιεῖται περὶ των φιλοσόφων, δύο γενη φασκων, ὧν τὸς μέν Βραχμᾶνας καλεῖ, τὸς δὲ Γερμᾶνας. κ. τ. λ. lib. 15.

and the judgment in the infernal regions; and other similar notions. These things are said of the *Brachmanes.*'

STRABO notices likewise another order of people, opposed to the *Brachmanes*, and called *Pramnæ:* he characterises them as 'contentious cavillers, who ridiculed the *Brachmanes* for their study of physiology and astronomy *.

PHILOSTRATUS, in the life of APOLLONIUS, speaks of the *Brachmanes* as worshipping the sun. 'By day they pray to the sun respecting the seasons, which he governs, that he would send them in due time; and that *India* might thrive: and, in the evening, they intreat the solar ray not to be impatient of night, and to remain as conducted from them †.'

PLINY and SOLINUS ‡ also describe the Gymnosophists contemplating the sun: and HIEROCLES, as cited by STEPHANUS of *Byzantium* §, expressly declares the *Brachmanes* to be particularly devoted to the sun.

This worship, which distinguishes the orthodox *Hindus*, does not seem to have been at any time practised by the rival sects of JINA and BUDD'HA.

PORPHYRIUS, treating of a class of religious men, among the *Indians*, whom the *Greeks* were accus-

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* φιλοσόφοις τὲ τοῖς Βραχμᾶσιν ἀντιδιαῤῥῆνται Πράμνας ἐριστικούς τινας καὶ ἐλεγκτικούς. κ. τ. λ. lib. 15.

† Μεθ' ἡμέραν μεν οὖν ἥλιον ὑπὲρ τῶν ὡρων. κ. τ. λ. lib. 3. cap. 4.

‡ Pliny, lib. 7. c. 2. Solin. l. 52.

§ Τὸ Βραχμάνων φῦλον ἀνδρῶν φιλοσοφων, καὶ θεοῖς φίλων, ἡλίω δὲ μάλιστα καθωσιωμένων, Step. de Urbibus, ad vocem Brachmanes.

tomed to call *Gymnosophists*, mentions two orders of them; 'one, the *Brachmanes*; the other, the *Samanæans*: the *Brachmanes* receive religious knowledge, like the priesthood, in right of birth; but the *Samanæans* are select, and consist of persons choosing to prosecute divine studies.' He adds, on the authority of BARDESANES, that 'all the *Brachmanes* are of one race; for they are all descended from one father and one mother. But the *Samanæans* are not of their race; being selected from the whole nation of Indians, as before mentioned. The *Brachman* is subject to no domination; and contributes nothing to others *.'

In this passage, the *Brách*man, as an hereditary order of priesthood, is contrasted with another religious order; to which persons of various tribes were admissible: and the *Samanæans*, who are obviously the same with the *Germanes* of STRABO, were doubtless *Sannyásis*; but may have belonged to any of the sects of *Hindus*. The name seems to bear some affinity to the *Sraman'as*, or ascetics of the *Jainas* and *Baudd'has*.

CLEMENS ALEXANDRINUS does indeed hint, that all the *Brách*manes revered their wise men as deities †; and in another place, he describes them as worshipping HERCULES and PAN ‡. But the following passage from CLEMENS is most in point. Having said, that philosophy flourished anciently among the barbarians, and afterwards was introduced among the *Greeks*; he instances the prophets of the Egyptians, the Chaldees of the *Assyrians*; the Druids of the *Gauls* (Galatæ); the *Samanæans* of the *Bactrians*;

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* Porph. de Abstinentia, lib. 4.

† Και μοι δοκεσιν, &c. Strom. lib. 1.

‡ Strom. lib. 3, &c.

the philosophers of the *Celts;* the Magi of the *Persians;* the Gymnosophists of the *Indians:* and proceeds thus.—They are of two kinds, some called *Sarmanes*, other *Brachmanes*. Among the *Sarmanes*, those called *Allobii* *, neither inhabit towns, nor have houses; they are clad with the bark of trees, and eat acorns, and drink water with their hands. They know not marriage, nor procreation of children; like those now called *Encratetai* (chaste). There are likewise, among the *Indians*, persons obeying the precepts of BUTTA, whom they worship as a god, on account of his extreme venerableness †.'

Here, to my apprehension, the followers of BUDD'HA are clearly distinguished from the *Brachmanes* and *Sarmanes* ‡. The latter, called *Germanes*, by STRABO, and *Samanæans*, by PORPHYRIUS, are the ascetics of a different religion; and may have belonged to the sect of JINA, or to another. The *Brachmanes* are apparently those, who are described by PHILOSTRATUS and HIEROCLES, as worshipping the sun; and, by STRABO and by ARRIAN, as performing sacrifices for the common benefit of the nation, as well as for individuals. The religion, which they practised, was so far conformable with the precepts of the *Védas:* and their doctrine and observances, their manners and opinions, as noticed by the authors above cited, agree with no other religious institutions known in *India*, but the orthodox sect.

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* Same with the Hylobii of Strabo. C.

† Διτ῀ὸν δὲ τυτων τὸ γενος, οἱ μεν Σαρμάναι, αυτῶν. οἱ δὲ Βραχμάναι καλὸμενοι. καὶ τῶν Σαρμανῶν οἱ Αλλόβιοι προσαγορευόμενοι, ὃ῀ε πόλεις οἰκῶσιν, ὅτε στέγας ἔχυσιν, δένδρων δὲ ἀμφιέννυνται φλοιοῖς, καὶ ἀκρόδρυα σιτῦνται, καὶ ὕδωρ ταῖς χερσὶ πίνυσιν· ὰ γάμον, ὰ παιδοποιίαν ἴσασιν, ὥσπερ οἱ νῦν Εγκρατηλαὶ καλὸμενοι. ἐισὶ δὲ τῶν Ινδῶν οἱ τοῖς Βῦτλα πειθόμενοι παραγ῀ελμασιν· ὃν δὶ ὑπερβολὴν σεμνότητ© ἐις Θεὸν τετιμήκασι. Strom. lib. 1.

‡ The passage has been interpreted differently; as if CLEMENS said, that the *Allobii* were those who worshipped BUTTA. (See MORERI Art. *Sammanéens.*) The text is ambiguous.

In short, the *Bráhmanes* are distinctly mentioned by Greek authors, as the first of the tribes or casts, into which the Indian nation was then, as now, divided. They are expressly discriminated from the sect of BUDD'HA by one ancient author, and from the *Sarmanes*, or *Samanæans*, (ascetics of various tribes,) by others. They are described by more than one authority, as worshipping the sun, as performing sacrifices, and as denying the eternity of the world, and maintaining other tenets incompatible with the supposition, that the sects of BUDD'HA or JINA, could be meant. Their manners and doctrine, as described by these authors, are quite conformable with the notions and practice of the orthodox *Hindus*. It may therefore be confidently inferred, that the followers of the *Védas* flourished in *India*, when it was visited by the Greeks under ALEXANDER: and continued to flourish from the time of MEGASTHENES, who described them in the fourth century before CHRIST, to that of PORPHYRIUS, who speaks of them, on later authority, in the third century after CHRIST.

I have thus stated, as briefly as the nature of the subject permitted, a few of the facts and reasons by which the opinion, that the religion and institutions of the orthodox *Hindus* are more modern than the doctrines of JINA and of BUDD'HA, may, as I think, be successfully resisted. I have not undertaken a formal refutation of it, and have, therefore, passed, unnoticed, objections which are founded on misapprehension.

It is only necessary to remark, that the past prevalence of either of those sects in particular places, with its subsequent persecution there by the worshippers of SIVA, or of VISHNU, is no proof of its general priority. *Hindustan* proper was the early seat of the *Hindu* religion; and the acknowledged cradle of both the sects in question. They were foreigners in the Peninsula of India; and admitting, as a fact,

(what need not, however, be conceded,) that the orthodox *Hindus* had not been previously settled in the *Carnát'aca* and other districts, in which the *Jainas* or the *Baudd'has* have flourished, it cannot be thence concluded, that the followers of the *Védas* did not precede them in other provinces.

It may be proper to add, that the establishment of particlar sects, among the *Hindus* who acknowledge the *Védas*, does not affect the general question of relative antiquity. The special doctrines introduced by SANCARA-A'CHARYA, by RA'MA'NUJA, and by MA'D'HAVA'CHA'RYA, and of course the origin of the sects which receive those doctrines, may be referred, with precision, to the periods when their authors lived: but the religion, in which they are sectaries, has undoubtedly a much earlier origin.

To revert to the immediate object of these observations; which is that of explaining and supporting the information communicated by MAJOR MACKENZIE: I shall, for that purpose, state the substance of a few passages from a work of great authority, among the *Jainas*, entitled *Calpa-Sútra*, and from a vocabulary of the *Sanscrit* language by an author of the *Jaina* sect.

The *Abhid'hána Chintámeni*, a vocabulary of synonymous terms, by HE'MACHANDRA A'CHA'RYA, is divided into six chapters *(Cándas,)* the contents of which are thus stated in the author's preface. 'The superior deities *(Dévád'hidévas)* are noticed in the first chapter; the gods *(Dévas)* in the second; men in the third; beings furnished with one or more senses in the fourth; the infernal regions in the fifth; and terms of general use in the sixth. 'The earth,' observes this author, 'water, fire, air, and trees, have a single organ or sense *(indriya);* worms, ants, spiders, and the like, have two, three, or four senses; elephants, peacocks, fish, and other beings moving

on the earth, in the sky, or in water, are furnished with five senses: and so are gods and men, and the inhabitants of hell.'

The first chapter begins with the synonyma of a *Jina* or deified saint: among which the most common are *Arhat*, *Jinéśwara*, *Tírt'hancara* or *Tírt'hacara*: others, viz. *Jina*, *Sarvajnya*, and *Bhagavat*, occur also in the dictionary of AMERA as terms for a *Jina* or *Budd'ha*; but it is deserving of remark, that neither *Budd'ha*, nor *Sugata*, is stated by HÉMACHANDRA among these synonyma. In the subsequent chapter, however, on the subject of inferior gods, after noticing the gods of *Hindu* mythology, (INDRA and the rest, including BRAHMÁ, &c.) he states the synonyma of a *Budd'ha*, *Sugata*, or *Bód'hisatwa*; and afterwards specifies seven such, viz. VIPASYÍ, SIC'HÍ, VÍS'WANNA, CUCUCH'HANDA, CA'NCHANA, and CA'SYAPA*, expressly mentioning as the seventh BUDD'HA, SA'CYASINHA, also named SERVA'RT'HASIDD'HA, son of SUDD'HÓDANA and MAYÁ, a kinsman of the sun, from the race of GAUTAMA.

In the first chapter, after stating the general terms for a *Jina* or *Arhat*; the author proceeds to enumerate twenty-four *Arhats*, who have appeared in the present *Avasarpiní* age: and afterwards observes, that excepting MUNISUVRATA and NÉMI, who sprung from the race of HARI, the remaining twenty-two *Jinas* were born in the line of ICSHW'ACU †. The fathers and mothers of the several *Jinas* are then mentioned; their attendants; their standards or charac-

* Two of these names occur in Captain MAHONY's and Mr. JOINVILLE's lists of five BUDD'HAS. As. Res. vol. 7, p. 32 and 414.

† I understand that the JAINAS have a mythological poem entitled *Harivansá puráná*, different from the *Harivansá* of the orthodox. Their ISCHWACU, likewise, is a different person; and the name is said to be a title of their first JINA, RISHABA DEVA.

teristics; and the complexions with which they are figured or described.

The author next enumerates twenty-four *Jinas* who have appeared in the past *Utsarpiní* period; and twenty-four others who will appear in the future age: and, through the remainder of the first book, explains terms relative to the *Jaina* religion.

The names of the *Jinas* are specified in MAJOR MACKENZIE's communication. Wherever those names agree with HE'MACHANDRA's enumeration, I have added no remark; but where a difference occurs I have noticed it*, adding in the margin the name exhibited in the Sanscrit text.

I shall here subjoin the information gathered from HE'MACHANDRA'S vocabulary, and from the *Calpa Sútra* and other authorities, relative to the *Jinas* belonging to the present period. They appear to be the deified saints, who are now worshipped by the *Jaina* sect. They are all figured in the same contemplative posture, with little variation in their appearance, besides a difference of complexion: but the several *Jinas* have distinguishing marks or characteristic signs, which are usually engraved on the pedestals of their images, to discriminate them.

1. RĬSHABHA, or VRĬSHABHA, of the race of ICSHWA'CU, was son of NA'BHI by MARUDE'VA': he is figured of a yellow or golden complexion; and has a bull for his characteristic. His stature, as is pretended, was 500 poles *(dhanush)*; and the duration of his life, 8,400,000 great years *(púrva-varshá)*. According to the *Calpa Sútra*, as interpreted by the commentator, he was born at *Cósalá* or *Ayód'hyá* (whence he is named

* See pages 260, 261, 262.

Causalica), towards the latter part of the third age. He was the first king, first anchoret, and first saint; and is therefore entitled *Prat'hama-Rája*, *Prat'hama Bhícsshácara*, *Prat'hama Jina*, and *Prat'hama Tír-t'hancara*. At the time of his inauguration as king, his age was 2,000,000 years. He reigned 6,300,000 years; and then resigned his empire to his sons: and, having employed 100,000 years in passing through the several stages of austerity and sanctity, departed from this world on the summit of a mountain, named *Asht'ápada*. The date of his apotheosis was 3 years and $8\frac{1}{2}$ months before the end of the third age, at the precise interval of one whole age before the deification of the last *Jina*.

2. AJITA was son of JITA'SATRU by VIJAYA': of the same race with the first JINA, and represented as of the like complexion; with an elephant for his distinguishing mark. His stature was 450 poles; and his life extended to 7,200,000 great years. His deification took place, in the fourth age, when fifty *lacshas* of *crórs* of oceans of years had elapsed out of the tenth *crór* of *crórs* *.

3. SA'MBHAVA was son of JITA'RI by SE'NA'; of the same race and complexion with the preceding; distinguished by a horse; his stature was 400 poles; he lived 6,000,000 years; and he was deified 30 *lacshas* of *crórs* of *Ságaras* after the second *Jina*.

4. ABHINANDANA was son of SAMBARA by SIDD'HA'RT'HA': he has an ape for his peculiar sign. His stature was 300 poles; and his life reached to 5,000,000 years. His apotheosis was later by 10 *lacshas* of *crórs* of *Ságaras* than the foregoing.

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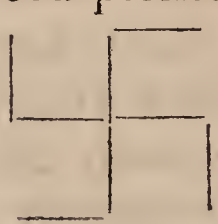
* The divisions of time have been noticed by MAJOR MACKENZIE, p. 257, and will be further explained.

5. SUMATI was son of ME'GHA by MANGAL'A: he has a curlew for his characteristic. His life endured 4,000,000 years, and his deification was nine *lacshas* of *crórs* of *Ságaras* after the fourth *Jina*.

6. PADMAPRABHA was son of SRÍD'HARA by SUSÍMA; of the same race with the preceding, but described of a red complexion. He has a lotos for his mark: and lived 3,000,000 years, being 200 poles in stature. He was deified 90,000 *crórs* of *Ságaras* after the fifth *Jina*.

7. SUPA'RS'WA was son of PRATISHTA by PRĬT'HWÍ; of the same line with the foregoing; but represented with a golden complexion: his sign is the figure called *Swastica*.  He lived 2,000,000 years; and was deified 9,000 *crórs* of *Ságaras* subsequent to the sixth *Jina*.

8. CHANDRAPRABHA was son of MAHA'SE'NA by LACSHMAN'A'; of the same race with the last, but figured with a fair complexion: his sign is the moon; his stature was 150 poles, and he lived 1,000,000 years: and his apotheosis took place 900 *crórs* of *Ságaras* later than the seventh *Jina*.

9. PUSHPADANTA, also named SUVID'HI, was son of SUPRIYA by RA'MA': of the same line with the preceding, and described of a similar complexion: his mark is a marine monster *(Macara)*: his stature was 100 poles, and the duration of his life 200,000 years. He was deified 90 *crórs* of *Ságaras* after the eighth *Jina*.

10. SÍTALA was son of DRĬ'D'HARAT'HA by NANDA': of the same race, and represented with a golden complexion: his characteristic is the mark called

Srívatsa. His stature was 90 poles; and his life 100,000 great years; his deification dates 9 *crórs* of *Ságaras* later than the preceding.

11. 'Sre'y'an ('Sre'yas) or 'Sre'ya'nsa, was son of Vishnu by Vishna'; of the same race, and with a similar complexion; having a rhinoceros for his sign. He was 80 poles in stature, and lived 8,400,000 common years. His apotheosis took place more than 100 *Ságaras* of years before the close of the fourth age.

12. Va'supújya was son of Vasupújya by Jaya': of the same race, and represented with a red complexion, having a buffalo for his mark: and he was 70 poles high, lived 7,200,000 years, and was deified later by 54 *Ságaras* than the eleventh *Jina*.

13. Vimala was son of Críṭavarman by 'Sya'ma'; of the same race; described of a golden complexion, having a boar for his characteristic; he was 60 poles high, lived 6,000,000 years, and was deified 30 *Ságaras* later than the twelfth *Jina*.

14. Ananta, also named Anantajit, was son of Sinhase'na by Suyas'a'. He has a falcon for his sign; his stature was 50 poles, the duration of his life 3,000,000 years, and his apotheosis 9 *Ságaras* after the preceding.

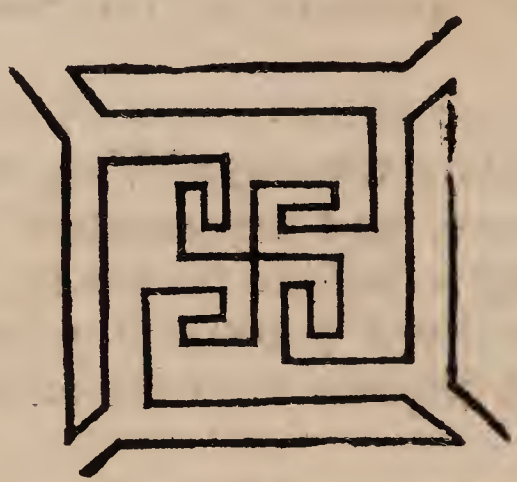
15. D'harma was son of Bha'nu by Suvrata'; characterised by the thunderbolt: 45 poles in stature, and lived 1,000,000 years: deified 4 *Ságaras* later than the foregoing.

16. Sa'nti was son of Vis'wase'na by Achira, having an antelope for his sign; he was 40 poles

high, lived 100,000 years, and was deified 2 *Ságaras* subsequent to the last mentioned *.

17. CUNT'HU was son of SÚRA, by SRÍ; he has a goat for his mark; his height was 35 poles, and his life 95,000 years. His apotheosis is dated in the last *palya* of the fourth age.

18. ARA was son of SUDARSA'NA by DE'VÍ: characterised by the figure called *Nandavarta*:



his stature was 30 poles, his life 84,000 years, and his deification 1000 *crórs* of years before the next *Jina*.

19. MALLI was son of CUMBHA by PRABHA'VALÍ; of the same race with the preceding; and represented of a blue complexion; having a jar for his characteristic; he was 25 poles high, and lived 55,000 years; and was deified 6,584,000 years before the close of the fourth age.

20. MUNISUVRATA, also named SUVRATA, or MUNI, was son of SUMITRA by PADMA', sprung from the race called HARIVANS'A; represented with

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* The life of this *Jina* is the subject of a separate work entitled *Sántipuráṇa*.

a black complexion, having a tortoise for his sign: his height was 20 poles, and his life extended to 30,000 years. His apotheosis is dated 1,184,000 years before the end of the fourth age.

21. NAMI was son of VIJAYA by VIPRA'; of the race of ICSHWA'CU: figured with a golden complexion; having for his mark a blue water-lily *(Nilótpala)*; his stature was 15 poles; his life 10,000 years: and his deification took place 584,000 years before the expiration of the fourth age.

22. NE'MI, also called ARISHT'ANE'MI, was son of the king SUMUDRAJAYA by 'SIVA'; of the line denominated HARIVANS'A; described as of a black complexion, having a conch for his sign. According to the *Calpa sútra*, he was born at *Sóriyapura*; and, when 300 years of age, entered on the practice of austerity. He employed 700 years in passing through the several stages of sanctity; and, having attained the age of 1000 years, departed from this world at *Ujjinta*, which is described as the peak of a mountain, the same, according to the commentator, with *Girandra**. The date of this event is 84,000 years before the close of the fourth age.

23. PA'RS'WA (or PA'RS'WANA'T'HA) was son of the king AS'WASE'NA by VA'MA', or BA'MA'DE'VI'; of the race of IC'SHWA'CU; figured with a blue complexion, having a serpent for his characteristic. The life of this celebrated JINA, who was perhaps the real founder of the sect, is the subject of a poem entitled *Párs'wanát'ha charitra*. According to the *Calpa*

* I understand this to be a mountain situated in the west of *India*: and much visited by pilgrims.

sútra, he was born at *Bánárasí* *, and commenced his series of religious austerities at thirty years of age; and having completed them in 70 years, and having consequently attained the age of 100 years, he died on Mount *Samméya* or *Samét* †. This happened precisely 250 years before the apotheosis of the next JINA: being stated by the author of the *Calpa sútra* at 1230 years before the date of that book.

24. VARD'HAMÁ'NA, also named VÍRA, MAHÁ-VÍ'RA, &c. and surnamed *Charama-tírt'hacrít*, or last of the *Jinas*: emphatically called 'SRAMAN'A, or the saint. He is reckoned son of SIDD'HÁRT'HA by TRI-SÁLÁ'; and is described of a golden complexion, having a lion for his standard.

The subject of the *Calpa sútra* before cited is the life and institutions of this JINA. I shall here state an abstract of his history as there given, premising that the work, like other religious books of the *Jainas*, is composed in the *Prácrit* called *Mágad'hí*; and that the *Sanscrit* language is used by the *Jainas* for translations, or for commentaries, on account of the great obscurity of the *Prácrit* tongue ‡.

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* *Bhéláp*urá, in the suburbs of Benares, is esteemed holy, as the place of his nativity.

† *Samét sic'hara*, called in Major Rennel's map *Parsonaut*, is situated among the hills between *Bihár* and *Bengal*. Its holiness is great in the estimation of the *Jainas*: and it is said to be visited by pilgrims from the remotest provinces of India.

‡ This *Prácrit*, which does not differ from the language introduced by dramatic poets into their writings, and assigned by them to the female persons in their dramas, is formed from *Sanscrit*. I once conjectured it to have been formerly the colloquial dialect of the *Sáraswata Bráhmens* (As. Res. vol. 7, p. 219;) but this conjecture has not been confirmed by further researches. I believe it to be the same language with the *Páli* of *Ceylon*.

According to this authority, the last *Tírt'hancara*, quitting the state of a deity, and relinquishing the longevity of a god, to obtain immortality as a saint, was incarnate towards the close of the fourth age, (now past,) when 75 years and $8\frac{1}{2}$ months of it remained. He was at first conceived by DE'VA'NANDA, wife of RISHABHADATTA, a *Bráhmána* inhabiting *Bráhmanacundagráma*, a city of *Bháratavarsha*, in *Jambudwípa*. The conception was announced to her by dreams. INDRA *, or SACRA, who is the presiding deity on the south of *Méru*, and abides in the first range of celestial regions, called *Saud'harma*, being apprized of MAHA'VÍRA's incarnation, prostrated himself, and worshipped the future saint; but reflecting that no great personage was ever born in an indigent and mendicant family, as that of a *Bráhmaná*, INDRA commanded his chief attendant HARINAIGUMESHI, to remove the fetus from the womb of DE'VA'NANDA' to that of TRISALA, wife of SIDD'HA'RT'HA, a prince of the race of ICSHWA'CU, and of the *Cásyapa* family. This was accordingly executed; and the new conception was announced to TRISALA' by dreams; which were expounded by soothsayers, as foreboding the birth of a future *Jina*. In due time, he was born; and his birth celebrated with great rejoicings.

His father gave him the name of VARD'HAMA'NA. But he is also known by two other names; SRAMANA and MAHA'VÍRA. His father has similarly three appellations, SIDD'HA'RT'HA, SREYA'NSA, and YAS'ASWÍ; and his mother likewise has three titles, TRISALA, VIDE'HADINNA', and PRÍTICA'RIN'I. His paternal uncle was SUPA'RS'WA, his elder brother, NANDI-

* The *Jainas* admit numerous INDRAS; but some of the attributes, stated in this place by the *Calpasútra*, belong to the INDRA' of the Indian mythology.

VARD'HANA, his sister (mother of JAMA'LI) SUDARSANA'. His wife was YASÓDA', by whom he had a daughter, (who became wife of JAMA'LI,) named ANÓJJA and PRIYADARS'ANA'. His grand-daughter was called 'SE'SHAVATÍ and JASÓVATÍ.

His father and mother died when he was 28 years of age; and he afterwards continued two years with his elder brother: after the second year he renounced worldly pursuits, and departed amidst the applauses of gods and men, to practise austerities. The progress of his devout exercises, and of his attainment of divine knowledge, is related at great length. Finally, he became an ARHAT, or JINA, being worthy of universal adoration, and having subdued all passions *; being likewise omniscient and all-seeing: and thus, at the age of 72 years, he became exempt from all pain for ever. This event is stated to have happened at the court of king HASTIPA'LA, in the city of *Páwápurí*, or *Pápápurí* †; and is dated 3 years and $8\frac{1}{2}$ months before the close of the fourth age, (called *Duc'hamá suc'hamá)* in the great period named *avasarpiní*. The author of the *Calpasútra* mentions, in several places, that, when he wrote, 980 years had elapsed since this apotheosis ‡. According to tradition, the death of the last JINA happened more than two thousand four hundred years

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* So the commentator expounds both terms.

† Near *Rájagriha*, in *Bihár*. It is accordingly a place of sanctity. Other holy places, which have been mentioned to me, are *Champápúrí*, near *Bhágalpúr*, *Chandrávati* distant ten miles from *Benares*. and the ancient city *Hastináipura*, in *Hindustan:* also *Satrunjaya*, said to be situated in the west of *India*.

‡ Samanassa Bhagaväu MAHA'BI'RASSA Jàva duhkha Hínassa Navabása Sayàïn Bicwantáïn dasamassaya Bása sayassa ayam Así imé sambach'hare Cálé gach'haï. Nine hundred years have passed since the adorable MAHA'BI'RA became exempt from pain; and, of the tenth century of years, eighty are the time which is now elapsed.

since; and the *Calpasútra* appears therefore to have been composed about fifteen hundred years ago *.

The several *Jinas* are described as attended by numerous followers, distributed into classes, under a few chief disciples, entitled *Gańad'haras*, or *Gańá-d'hipas*. The last *Jina* had nine such classes of followers, under eleven disciples. INDRABHÚTI, AGNIBHÚTI, VA'YUBHÚTI, VYACTA, SUDHARMA, MANDICAPUTRA, MAURYAPUTRA, ACAMPITA, ACHALABHRA'TA', ME'TA'RYA, PRABHA'SA. Nine of these disciples died with MAHA'VÍRA; and two of them, INDRABHÚTI and SUD'HARMA, survived him, and subsequently attained beatitude. The *Calpasútra* adds, that all ascetics, or candidates for holiness, were pupils in succession from SUDHARMA, none of the others having left successors. The author then proceeds to trace the succession from SUDHARMA to the different *Sác'hás*, or orders of priests, many of which appear still to exist. This enumeration disproves the list communicated to MAJOR MACKENZIE by the head priest of *Belligola*.

The ages and periods, which have been more than once alluded to in the foregoing account of the *Jainas*, are briefly explained in HE'MACHANDRA'S vocabulary. In the second chapter, which relates to the heavens and the gods, &c. the author, speaking of time, observes, that it is distinguished into *Avasarpiní* and *Utsarpiní*, adding that the whole period is completed by twenty *cótís* of *cótís* of *Sagaras*; or 2,000,000,000,000,000 oceans of years. I do not find, that he any where explains the space of time

* The most ancient copy in my possession, and the oldest one which I have seen, is dated in 1614 samvat: it is nearly 250 years old.

denominated *Ságara*, or ocean. But I understand it to be an extravagant estimate of the time, which would elapse, before a vast cavity, filled with chopped hairs, could be emptied, at the rate of one piece of hair in a century: the time requisite to empty such a cavity, measured by a *yójana* every way, is a *Palya;* and that repeated ten *cótís* of *cótís* of times *, is a *Ságara.*

Each of the periods, above-mentioned, is stated by HEMACHANDRA, as comprizing six *Aras;* the names and duration of which agree with the information communicated to MAJOR MACKENZIE: In the one, or the declining period, they pass from extreme felicity *(ecántasuhc'ha)* through intermediate gradations, to extreme misery *(ecánta duhc'ha).* In the other, or rising period, they ascend, in the same order, from misery to felicity. During the three first ages of one period, mortals lived for one, two, or three *Palyas;* their stature was one, two, or three leagues *(Gavyutis);* and they subsisted on the fruit of miraculous trees; which yielded spontaneously food, apparel, ornaments, garlands, habitation, nurture, light, musical instruments, and household utensils. In the fourth age, men lived ten millions of years; and their stature was 500 poles *(Dhanush):* in the fifth age, the life of man is a hundred years: and the limit of his stature, seven cubits: in the sixth, he is reduced to sixteen years, and the height of one cubit. In the next period, this succession of ages is reversed, and afterwards they recommence as before.

Here we cannot but observe, that the *Jainas* are still more extravagant in their inventions, than the

* 1.000.000.000.000.000 palyas = one *ságara*, or *sagarópama.*

prevailing sects of *Hindus*, absurd as these are in their fables.

In his third chapter, HE'MACHANDRA, having stated the terms for paramount and tributary princes, mentions the twelve *Chacravartís*, and adds the patronymics and origin of them. BHARATA is surnamed A'RSHABHI, or son of RĬSHABHA; MAGHAVAN is son of VIJAYA; and SANATCUMA'RA, of ASWASE'NA. 'SA'NTI, CUNT'HU and ARA are the JINAS so named. SAGARA is described as son of SUMITRA; SÚBHÚMA is entitled CA'RTAVÍRYA; PADMA is said to be son of PADMÓTTARA; HARISHENA of HARI; JAYA of VIJAYA; BRAHMADATTA of BRAHME; and all are declared to have sprung from the race of ICSHWA'CU.

A list follows, which, like the preceding, agrees nearly with the information communicated to MAJOR MACKENZIE. It consists of nine persons, entitled *Vasudévas*, and *Crĭshnas*. Here TRĬPRĬSHT'A is mentioned with the patronymic PRA'JA'PATYA; DWIPRĬSHT'A is said to have sprung from BRAHME; SWAYAMBHÚ is expressly called a son of RUDRA; and PURUSHÓTTAMA, of SÓMA, or the moon. PURUSHASINHA is surnamed 'SAIVI, or son of 'SIVA; PURUSHAPUNDARÍCA, is said to have sprung from MAHA'S'IRAS. DATTA is termed son of AGNISINHA; NA'RA'YANA has the patronymic DA'SARAT'HI (which belongs to RA'MACHANDRA): and CRĬSHNA is described as sprung from VASUDE'VA.

Nine other persons are next mentioned, under the designation of *'Sucla Balas*, viz. 1 *Achala*. 2 *Vijaya*. 3 *Bhadra*. 4 *Suprabha*. 5 *Sudarsana*. 6 *Ananda*. 7 *Nanda*. 8 *Padma*. 9 *Ráma*.

They are followed by a list of nine foes of VISHN'U: it corresponds nearly with one of the lists noticed by MAJOR MACKENZIE, viz. 1 AS'WAGRÍVA, 2 TA'RACA,

3 ME'RACA, 4 MAD'HU, 5 NISUMBHA, 6 BALI, 7 PRAHLA'DA. 8 The king of *Lancá* (RA'VAN'A). 9 The king of *Magad'ha* (JARA'SAND'HA).

It is observed, that, with the *Jinas*, these complete the number of sixty-three eminent personages, viz. 24 *Jinas*, 12 *Chacravartís*, 9 *Vásudévas*, 9 *Baladévas*, and 9 *Prativásudévas*.

It appears, from the information procured by MAJOR MACKENZIE, that all these appertain to the heroic history of the *Jaina* writers. Most of them are also well known to the orthodox Hindus; and are the principal personages in the *Purán'as*.

HE'MACHANDRA subsequently notices many names of princes, familiar to the Hindus of other sects. He begins with PRI'T'HU son of VE'NA, whom he terms the first king: and goes on to MA'ND'HA'TA', HARIS'CHANDRA; BHARATA son of DUSHYANTA, &c. Towards the end of his enumeration of conspicuous princes, he mentions CARN'A, king of *Champá* and *Anga;* HA'LA or SA'LAVA'HANA; and CUMA'RAPA'LA, surnamed CHAULUCYA, a royal saint, who seems, from the title of *Paramárhata*, to have been a *Jaina*, and apparently the only one in that enumeration.

In a subsequent part of the same chapter, HE'MACHANDRA, (who was himself a theologian of his sect, and author of hymns to JINA *,) mentions and discriminates the various sects; viz. 1st, *A'rhatas*, or *Jainas*. 2ndly, *Saugatas*, or *Baudd'has*, and, 3dly, six philosophical schools, viz. 1st. *Naiyáyica;* 2d. *Yóga;* 3d. CA'PILAS *Sánc'hya;* 4th. *Vais'éshica;* 5th.

* A commentary on these hymns is dated in Saca 1214 (A. D. 1292); but how much earlier HE'MACHANDRA lived, is not yet ascertained.

Várhaspatya, or *Nástica*; and 6th. *Chárváca*, or *Lócáyata*. The two last are reputed atheistical, as denying a future state and a providence. If those be omitted, and the two *Mímánsás* inserted, we have the six schemes of Philosophy familiar to the Indian circle of the sciences.

The fourth chapter of HE'MACHANDRA's vocabulary relates to earth and animals. Here the author mentions the distinctions of countries which appear to be adopted by the *Jainas*; viz. the regions (*Varsha*) named *Bharata*, *Airávata*, and *Vidéhá*, to which he adds *Curu*; noticing also other distinctions familiar to the *Hindus* of other sects, but explaining some of them according to the ideas of the *Jainas*. '*Aryavarta*,' he observes, 'is the native land of *Jinas*, *Chacrís*, and *Ardd'hachacrís*, situated between the *Vind'hya* and *Himádri* mountains.' This remark confines the theatre of *Jaina* history, religious and heroic, within the limits of *Hindustán* proper.

A passage, in BHA'SCARA's treatise on the sphere, will suggest further observations concerning the opinions of the *Jainas*, on the divisions of the earth. Having noticed, for the purpose of confuting it, a notion maintained by the *Baudd'has*, (whom some of the commentators, as usual among orthodox *Hindus*, confound with the *Jainas*;) respecting the descent or fall of the earth in space; he says*, 'the naked sectaries and the rest affirm, that two suns, two moons, and two sets of stars, appear alternately: against them I allege this reasoning. How absurd is the notion which you have formed of duplicate suns, moons, and stars; when you see the revolution of the polar fish †.'

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* *Gólád'hyáya*. §. 3. v. 8 & 10.
† Ursa minor.

The commentators * agree that the *Jainas* are here meant: and one of them remarks, that they are described as 'naked sectaries, &c.' Because the class of *Digambaras* is a principal one among these people.

It is true that the *Jainas* do entertain the preposterous notion here attributed to them: and it is also true, that the *Digambaras*, among the *Jainas*, are distinguished from the *Súclámbaras*, not merely by the white dress of the one, and the nakedness (or else the tawny apparel) of the other; but also by some particular tenets and diversity of doctrine.—However, both concur in the same ideas regarding the earth and planets, which shall be forthwith stated, from the authority of *Jaina* books; after remarking, by the way, that ascetics of the orthodox sect, in the last stage of exaltation, when they become *Paramahansa*, also disuse clothing.

The world, which according to the *Jainas*, is eternal, is figured by them as a spindle resting on half of another; or, as they describe it, three cups, of which the lowest is inverted; and the uppermost meets at its circumference the middle one. They also represent the world by comparison to a woman with her arms akimbo †. Her waist, or according to the description first mentioned, the meeting of the lower cups, is the earth. The spindle above, answering to the superior portion of the woman's person, is the abode of the gods; and the inferior part of the figure comprehends the infernal regions. The earth, which they suppose to be a flat surface, is bounded by a circle, of which the diameter is one *raju* ‡. The

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* Lacshmi'da'sa, Muni's'wara, and the *Vásanábhásh ya*.

† The *Sangrahan'i ratna* and *Lócanáb sútra*, both in *Prácrit*, are the authorities here used.

‡ This is explained to be a measure of space, through which the

lower spindle comprises seven tiers of inferior earths or hells, at the distance of a *raju* from each other, and its base is measured by seven *rajus*. These seven hells are *Ratna prabhá*, *Sancara prabhá*, *Bálucá prabhá*, *Panca prabhá*, *Dhúman prabhá*, *Tama prabhá*, *Tamatama prabhá*. The upper spindle is also seven *rajus* high; and its greatest breadth is five *rajus*. Its summit, which is 4,500,000 *Yójanas* wide, is the abode of the deified saints: beneath that are five *Vimánas*, or abodes of gods: of which the centre one is named *Sarvárt'hasidd'ha:* it is encompassed by the regions *Aparájita*, *Jayanta*, *Vaijayanta*, and *Vijaya*. Next, at the distance of one *raju* from the summit, follow nine tiers of worlds, representing a necklace *(graivéyaca,)* and inhabited by gods, denominated, from their conceited pretensions to supremacy, *Ahamindra*. These nine regions are, *Aditya*, *Prítincara*, *Sómanasa*, *Sumanasa*, *Suvisála*, *Sarvatóbhadra*, *Manórama*, *Supravadd'ha*, and *Sudars'ana*.

Under these regions are twelve (the *Digambaras* say sixteen) other regions, in eight tiers, from one to five *rajus* above the earth. They are filled with *Vimánas*, or abodes of various classes of gods, called by the general name of *Calpavásis*. These worlds, reckoning from that nearest the earth; are, *Saud'hama* and *I's'ána; Sanatcumdra* and *Mahéndra; Brahme; Lántaca; S'ucra; Sahasrára; A'nata* and *Pránata; Arana* and *Achyuta*.

The sect of *Jina* distinguish four classes of deities, the *Vaimánicas*, *Bhuvanapatis*, *Jiótishis*, and *Vyantaras*. The last comprises eight orders of demigods, or spirits, admitted by the Hindus in general, as the

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gods are able to travel in six months, at the rate of 2,057,152 *Yójanas*, (of 2000 *crósa* each,) in the twinkling of an eye.

Rácshasas, Písáchas, Cinnaras, &c. supposed to range over the earth. The preceding class *(Jyótishis)*, comprehends five orders of luminaries; suns, moons, planets, constellations and stars, of which more hereafter. The *Vaimánicas* belong to the various *Vimánas*, in the twelve regions, or worlds, inhabited by gods. The class of *Bhuvanapati* includes ten orders, entitled *Asuracumára, Nágacumára*, &c.; each governed by two *Indras*. All these gods are mortal, except, perhaps, the luminaries.

The earth consists of numerous distinct continents, in concentric circles, separated by seas forming rings between them. The first circle is *Jambúdwípa*, with the mountain *Sudarśa Méru* in the centre. It is encompassed by a ring containing the salt ocean; beyond which is the zone, named *Dhátucídwípa;* similarly surrounded by a black ocean. This again is encircled by *Pushcaradwípa;* of which only the first half is accessible to mankind: being separated from the remoter half, by an impassable range of mountains, denominated *Mánushóttara Parvata. Dhátusídwipa* contains two mountains, similar to *Sumêru*, named *Vijanga* and *Achala;* and *Pushcara* contains two others, called *Mandírá* and *Vidyunmáli.*

The diameter of *Jambúdwípa* being 100,000 great *Yójanas**, if the 190th part be taken, or $526\frac{6}{19}$, we have the breadth of *Bharata varsha*, which occupies the southern segment of the circle. *Airávata* is a similar northern segment. A band ($33648\frac{4}{19}$ *Yójanas* wide) across the circle, with *Sudarśa Méru* in the middle of it, is *Vidéha varsha*, divided by *Méru* (or by four peaks like elephant's teeth, at the four corners of that

* Each great *Yójana* contains 2000 *cós.*

vaſt mountain) into eaſt and weſt *Vidéha*. These three regions, *Bharata*, *Airávata*, and *Vidéha*, are inhabited by men who practise religious duties. They are denominated *Carmachúmi*, and appear to be furnished with distincts sets of *Tirthancaras* or saints entitled *Jina*. The intermediate regions, north and south of *Méru*, are bounded by four chains of mountains; and intersected by two others: in such a manner, that the ranges of mountains, and the intermediate vallies, increase in breadth progressively. Thus *Himavat* is twice as broad as *Bharata varsha* (or $1052\frac{12}{19}$ y); The valley beyond it is double its breadth ($2105\frac{5}{19}$ y); the mountain *Mahá'himavat*, is twice as much ($4210\frac{10}{19}$ y); its valley is again double ($8421\frac{1}{19}$ y); and the mountain *Nishad'ha* has twice that breadth ($16842\frac{2}{19}$ y). The vallies between these mountains, and between similar ranges reckoned from *Airávata* (viz. *Sic'hari*, *Racmi*, and *Nila*), are inhabited by giants (*Yugala*), and are denominated *Bhógabhúmi*. From either extremity of the two ranges of mountains named *Himavat* and *Sic'hari*, a pair of tusks project over the sea; each divided into seven countries denominated *Antara-dwipas*. There are consequently fifty-six such; which are called *Cubhógakhúmi*, being the abode of evil doers. None of these regions suffer a periodical destruction; except *Bharata* and *Airávata*, which are depopulated, and again peopled, at the close of the great periods beforementioned.

We come now to the immediate purpose, for which these notions of the *Jainas* have been here explained. They conceive the setting and rising of stars and planets to be caused by the mountain *Sumáru*: and suppose three times the period of a planet's appearance to be requisite for it to pass round *Sumáru*, and return to the place whence it emerges. Accordingly they allot

two suns, as many moons, and an equal number of each planet, star, and constellation, to *Jambúdwipa*; and imagine that these appear, on alternate days, south and north of *Méru*. They similarly allot twice that number to the salt ocean; six times as many to *Dhátuci dwipa*; 21 times as many, or 42 of each, to the *Cálódad'hi*; and 72 of each to *Pushcara dwipa*.

It is this notion, applied to the earth which we inhabit, that Bh'ascara refutes. His argument is thus explained by his commentators.

'The star close to the north pole, with those near it to the east and west, form a constellation figured by the Indian astronomers as a fish. In the beginning of the night (supposing the sun to be near *Bharani* or *Musca)*, the fish's tail is towards the west, and his head towards the east; but at the close of the night, the fish's tail, having made half a revolution, is towards the east, and his head towards the west: and since the sun, when rising and setting, is in a line with the fish's tail, there is but one sun; not two.' This explanation is given by Munís'wara and Lacshmída'sa. But the *Vásaná Bháshya* reverses the fish; placing his head towards the west at sun set, when the sun is near *Bharáni*.

VI.

On the INDIAN *and* ARABIAN DIVISIONS *of the* ZODIACK.

BY H. T. COLEBROOKE, ESQ.

THE researches, of which the result is here laid before the Asiatick Society, were undertaken for the purpose of ascertaining correctly the particular stars, which give names to the Indian divisions of the Zodiack. The inquiry has at intervals been relinquished and resumed: it was indeed attended with considerable difficulties. None of the native astronomers, whom I consulted, were able to point out, in the heavens, all the asterisms for which they had names: it became, therefore, necessary to recur to their books, in which the positions of the principal stars are given. Here a fresh difficulty arose from the real or the seeming disagreement of the place of a star, with the division of the Zodiack, to which it was referred: and I was led from the consideration of this and of other apparent contradictions, to compare carefully the places assigned by the Hindus to their *naeshatras*, with the positions of the lunar mansions, as determined by the Arabian astronomers. After repeated examination of this subject, with the aid afforded by the labours of those, who have preceded me in the same inquiry, I now venture to offer to the perusal of the Asiatick Society the following remarks, with the hope, that they will be found to contain a correct ascertainment of the stars by which the Hindus have been long accustomed to trace the moon's path.

THE question, which I proposed to myself for investigation, appeared to me important, and deserving of the labour bestowed upon it, as obviously essential towards a knowledge of Indian astronomy, and as tending to determine another question: namely, whether the Indian and Arabian divisions of the Zodiack had a common origin. SIR WILLIAM JONES thought,

that they had not: I incline to the contrary opinion. The co-incidence appears to me too exact, in most instances, to be the effect of chance: in others, the differences are only such, as to authorize the remark, that the nation, which borrowed from the other, has not copied with servility. I apprehend, that it must have been the Arabs who adopted (with slight variations) a division of the Zodiack familiar to the Hindus. This, at least, seems to be more probable than the supposition, that the Indians received their system from the Arabians: we know, that the Hindus have preserved the memory of a former situation of the Colures, compared to constellations, which mark divisions of the Zodiack in their astronomy; but no similar trace remains of the use of the lunar mansions, as divisions of the Zodiack, among the Arabs, in so very remote times.

It will be found, that I differ much from Sir William Jones in regard to the stars constituting the asterisms of Indian astronomy. On this, it may be sufficient to remind the reader, that Sir William Jones stated only a conjecture founded on a consideration of the figure of the *nacshatra* and the number of its stars, compared with those actually situated near the division of the ecliptick, to which the *nacshatra* gives name. He was not apprized, that the Hindus themselves place some of these constellations far out of the limits of the Zodiack.

I shall examine the several *nac'shatras* and lunar mansions in their order; previously quoting from the *Hindu* astronomers, the positions assigned to the principal star, termed the *yógatárá*. This, according to Brahmegupta, (as cited by Lacshmída'sa in his commentary on the *Sirómaní,*) or according to the *Brahmesidd'hánta* (cited by Bhu'd'hara), is the brightest star of each cluster. But the *Súryasidd'hánta* specifies the relative situation of the *Yógatárá* in respect

of the other stars; and that does not always agree with the position of the most conspicuous star.

The number of stars in each asterism, and the figure under which the asterism is represented, are specified by *Hindu* astronomers: particularly by Srípati in the *Rotnamálá*. These, with the positions of the stars relatively to the ecliptick, are exhibited in the annexed table. It contains the whole purport of many obscure and almost enigmatical verses, of which a verbal translation would be nearly as unintelligible to the English reader, as the original text.

The authorities, on which I have chiefly relied, because they are universally received by Indian astronomers, are the *Súryasidd'hánta*, *Siróṃani*, and *Grahalághava*. They have been carefully examined, comparing at the same time several commentaries. The *Ratnamálá* of S'rípati is cited for the figures of the asterisms; and the same passage had been noticed by Sir William Jones (As. Res. vol. 2. p. 294). It agrees nearly with the text of Vasisht''ha cited by Munís'wara, and is confirmed in most instances by the *Muhúrta Chintámeni*. The same authority, confirmed with rare exceptions by Vasish't'ha, Sa'calya, and the *A'bharaṇ'a* is quoted for the number of stars in each asterism. The works of Brahmegupta have not been accessible to me: but the *Maríchi*, an excellent commentary on the *Sidd'hánta siróman'i*, by Munís'wara, adduces from that author a statement of the positions of the stars; and remarks, that it is founded on the *Brahmesidd'hánta*, contained in the *Vishnud'hermottara* *. Accordingly, I have found the same pas-

* Another *Brahmesidd'hánta* is entitled the *Sácalyasanhitá*. The author of the *Maríchi*, therefore, distinguishes the one to which he refers.

sage in the *Brahmesidd'hánta*, and verified it by the gloss entitled *Vásaná*; and I, therefore, use the quotation without distrust. Later authorities, whose statements coincide exactly with some of the preceding (as CAMALA'CARA in the *Tatwavivéca*) would be needlessly inserted: but one (MUN'ÍSWARA in the *Sidd'hánta sárvabhauma*), exhibiting the position of the stars differently, is quoted in the annexed table.

THE manner of observing the places of the stars is not explained in the original works first cited. The *Súryasidd'hánta* only hints briefly, that 'they astronomer should frame a sphere, and examine the apparent longitude and latitude *.' Commentators †, remarking on this passage, describe the manner of the observation: and the same description occurs, with little variation, in commentaries on the *Siromani* ‡. They direct a spherical instrument *(Golayantra)* to be constructed, according to instructions contained in a subsequent part of the text. This, as will be hereafter shewn, is precisely an armillary sphere. An additional circle graduated for degrees and minutes, is directed to be suspended on the pins of the axis as pivots. It is named *Véd'havalaya* or intersecting circle, and appears to be a circle of declination. After noticing this addition to the instrument, the instructions proceed to the rectifying of the *Golayantra* or armillary sphere, which is to be placed, so that the axis shall point to the pole, and the horizon be true by a water level.

THE instrument being thus placed, the observer is instructed to look at the star *Révatí* through a sight fitted to an orifice at the centre of the sphere; and

* *Sphutávicshépa* and *Sphutádhruvaca*; which will be explained further on.

† RANGANAT'HA and PHUD'HARA.

‡ In the *Vásanábháshya* and in the *Marichi*.

having found the star, to adjust by it the end of the sign Pisces on the ecliptick. The observer is then to look, through the sight, at the *yoga* star of *As'wini*, or of some other proposed object; and to bring the moveable circle of declination over it. The distance in degrees, from the intersection of this circle and ecliptick, to the end of *Mina* or Pisces, is its longitude *(d'hruvaca)* in degrees: and the number of degrees on the moveable circle of declination, from the same intersection to the place of the star, is its latitude *(vicshépa)* North or South *.

THE commentators † further remark, that 'the latitude, so found, is *(sphut'a)* apparent, being the place intercepted between the star and the ecliptick, on a circle passing through the poles; but the true latitude *(asphutá)* is found on a circle hung upon the poles of the celestial sphere, as directed in another place.' The longitude, found as above directed, is, in like manner, the space intercepted between the origin of the ecliptick and a circle of declination passing through the star: differing, consequently, from the true longitude. The same commentators add; that the longitudes and latitudes, exhibited in the text, are of the description thus explained: and those, which are stated in the *Surya sidd'hánta*, are expressly affirmed to be adapted to the time when the equinox did not differ from the origin of the ecliptick in the beginning of *Mésha*.

IT is obvious, that, if the commentators have rightly

* Father PETAU, and, after him, BAILLY, for reasons stated by them (Uranol. Dissert. 2. 2. Ast. Anc. p. 428.), are of opinion, that the ancient astronomers referred stars to the Equator; and that EUDOXUS and HIPPARCHUS must be so understood, when speaking of the longitudes of stars. Perhaps the Greek astronomers, like the Hindus, reckoned longitudes upon the ecliptick intersected by circles of declination, in the manner, which has been explained.

† BHUD'HARA is the most explicit on this point.

understood the text of their authors, the latitudes and longitudes, there given, require correction. It will indeed appear, in the progress of this inquiry, that the positions of stars distant from the ecliptick, as there given, do not exactly correspond with the true latitudes and longitudes of the stars supposed to be intended: and the disagreement may be accounted for, by the circumstance of the observations having been made in the manner above described.

ANOTHER mode of observation is taught in the *Sidd'hánta sundara* cited and expounded by the author of the *Sidd'hánta sárvabhauma*. 'A tube, adapted to the summit of a gnomon, is directed towards the star on the meridian: and the line of the tube, pointed to the star, is prolonged by a thread to the ground. The line from the summit of the gnomon to the base is the hypothenuse; the height of the gnomon is the perpendicular; and its distance from the extremity of the thread is the base of the triangle. Therefore, as the hypothenuse is to its base, so is the radius to a base, from which the line of the angle, and consequently the angle itself, are known. If it exceed the latitude, the declination is south; or, if the contrary, it is north. The right ascension of the star is ascertained by calculation from the hour of the night, and from the right ascension of the sun for that time. The declination of the corresponding point of the ecliptick being found, the sum or difference of the declinations, according as they are of the same or of different denominations, is the distance of the star from the ecliptick. The longitude of the same point is computed; and from these elements, with the actual precession of the equinox, may be calculated the true longitude of the star; as also its latitude on a circle passing through the poles of the ecliptick.'

SUCH, if I have rightly comprehended the meaning in a single and not very accurate copy of the text, is the purport of the directions given in the *Sidd'hánta*

sârvabhauma: the only work, in which the true latitudes and longitudes of the stars are attempted to be given. All the rest exhibit the longitude of the star's circle of declination, and its distance from the Ecliptick measured on that circle.

I SUPPOSE the original observations, of which the result is copied from BRAHMEGUPTA and the *Surya sidd'hánta*, with little variation, by successive authors, to have been made about the time, when the vernal equinox was near the first degree of *Mésha* *. The pole then was nearly seventeen degrees and a quarter from its present position, and stood a little beyond the star near the ear of the Camelopard. On this supposition, it will be accordingly found, that the assigned places of the *Nacshatras* are easily reconcileable to the positions of stars likely to be meant.

I SHALL here remark, that the notion of a polar star, common to the Indian and Grecian celestial spheres, implies considerable antiquity. It cannot have been taken from our present pole-star (α Ursæ minoris), which, as Mons. BAILLY has observed (Astronomie Ancienne, p. 511), was remote from the pole, when EUDOXUS described the sphere; at which time, according to the quotation of HIPPARCHUS, there was a star situated at the pole of the world †. BAILLY conjectures, as the intermediate stars of the sixth magnitude are too small to have designated the pole, that $\varkappa$ Draconis was the star meant by EUDOXUS, which had

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* BRAHMEGUPTA wrote soon after that period: and the *Súrya Sidd'hánta* is probably a work of nearly the same age. Mr. BENTLEY considers it as more modern (As. Res. vol. 6.): it certainly cannot be more ancient; for the equinox must have past the beginning of *Mésha*, or have been near it, when that work was composed.

† HIPPARCHUS. Comment. on Aratus. Lib. 1. p. 179.

been at its greatest approximation to the pole, little more than four degrees from it, about 1236 years before CHRIST. It must have been distant, between seven and eight degrees of a great circle, when EUDOXUS wrote. Possibly the great star in the Dragon (Draconis), which is situated very near to the circle described by the north pole round the pole of the ecliptick, had been previously designated as the polar star. It was within one degree of the north pole about 2836 years before CHRIST. As we know, that the idea could not be taken from the star in the tail of Ursa minor, we are forced to choose between BAILLY's conjecture or the supposition of a still greater antiquity. I should, therefore, be inclined to extend to the Indian sphere, his conjecture respecting that of EUDOXUS.

I SHALL now proceed to compare the *Nacshatras* with the *Manzils* of the moon, or lunar mansions.

I. *As'wini*, now the first *Nacshatra*, but anciently the last but one, probably obtained its present situation at the head of the Indian asterisms, when the beginning of the Zodiack was referred to the first degree of *Mésha*, or the Ram, on the Hindu sphere. As measuring a portion of the Zodiack, it occupies the first 13° 20′ of *Mésha* : and its beginning follows immediately after the principal star in the last *Nacshatra* (*Révati*), reckoned, by some exactly, by others nearly, opposite to the very conspicuous one, which forms the fourteenth asterism. Considered as a constellation, *As'wini* compresses three stars figured as a horse's head ; and the principal, which is also the northern one, is stated by all ancient authorities, in 10° N. and 8° E. from the beginning of *Mesha*.

THE first *Manzil*, or lunar mansion according to the Arabs, is entitled *Sherat'an*, (by the Persians cor-

ruptly called, as in the oblique case, *Sheratain)*, and comprises two stars of the third magnitude on the head of Aries, in lat. 6° 36′, and 7° 51′, N. and long. 26° 13′, and 27° 7′. (HYDE's ULUGH BEG, p. 58). With the addition of a third, also in the head of the Ram, the asterism is denominated *Ashrát*. The bright star of the 2d or 3d magnitude which is out of the figure of the Ram, according to ULUGH BEG, but on the nose according to HIPPARCHUS cited by this author from PTOLEMY, is determined *Nátih*: it is placed in Lat. 9° 30′ N. and Long. 1ˢ 0° 43′, and is apparently the same with the principal star in the Indian asterism; for MUHAMMED of *Tizin*, in his table of declination and right ascension, expressly terms it the first star of the *Sheratain*. (HYDE's Com. on ULUGH BEG's tables, p. 97).

MANY *Pandits*, consulted by me, have concurred in pointing to the three bright stars in the head of Aries (α β and γ) for the Indian constellation *As'wini*. The first star of Aries (α) was also shewn to Dr. HUNTER, at *Ujjayini*, for the principal one in this asterism; and Mr. DAVIS (As. Res. vol. 2. p. 226.) states the other two, as those which were pointed out to him by a skilful native astronomer, for the stars that distinguish *As'wini*. The same three stars, but with the addition of three others, were indicated to LE GENTIL, for this constellation (Mem. Acad. Scien. 1772. P. II. p. 209). I entertain therefore no doubt, that SIR W. JONES (As. Res. vol. 2. p. 298.) was right in placing the three stars of *As'wini* in, and near, the head of the Ram; and it is evident, that the first *Nacshatra* of the *Hindus* is here rightly determined, in exact conformity with the first Lunar mansion of the Arabs; although the longitude of α Arietis exceed, by half a degree, that which is deduced, for the end of *As'wini*, from the supposed situation of the Virgin's spike opposite to

the beginning of this *Nacshatra*; and although its circle of declination be 13° instead of 8° from the principal star in *Révati*.

II. *Bharan'i*, the second Indian asterism, comprises three stars figured by the *Yoni* or pudendum muliebre: and all ancient authorities concur in placing the principal and southern star of this *Nacshatra* in 12° N. The second *Manzil*, entitled *Butain*, is placed by ULUGH BEG (Hyde, p. 61.) in Lat. 1° 12′ and 3° 12′; and this cannot possibly be reconciled with the Hindu constellation. But *Muhammed* of *Tizin* (See HYDE's Commentary, p. 97), assigns to the bright star of *Butain* a declination of 23° N. exceeding by nearly 2° the declination allotted by him to *Nátih*, or his first star in *Sheratain*. This agrees with the difference between the principal stars of *As'wini* and *Bharan'i*; and it may be inferred, that some among the Muhammedan astronomers have concurred with the Hindus, in referring the second constellation to stars that form Musca. There were no good grounds for supposing *Bharan'i* to correspond with three stars on the tail of the Ram (As. Res. vol. 2. p. 298); and I have no doubt, that the stars, which compose this *Nacshatra*, have been rightly indicated to me, as three in Musca, forming a triangle almost equilateral: their brightness, and their equal distance from the first and third asterisms, corroborate this opinion, which will be confirmed by shewing, as will be done in the progress of this comparison, that the *Nacshatras* are not restricted to the limits of the Zodiack.

III. *Crittiká*, now the third, but formerly the first, *Nacshatra*, consists of six stars figured as a knife or razor, and the principal and southern star is placed in $4\frac{1}{2}^{\circ}$ or 5° N. and in 65 sixths of degrees (or 1° 50′)

from its own commencement, according to the *Surya sidd'hánta*, or 37° 28′ to 38° from the beginning of *Mésha*, according to the *Sidd'hánta siromani*, and *Grahalághava*, respectively. This longitude of the circle of declination corresponds nearly with that of the bright star in the Pleiades, which is 40° of longitude distant from the principal star of *Révati*.

The stars, indicated by Ulugh beg for *Thurayyá*, also correspond exactly with the Pleiades; and these were pointed out to the Jesuit missionaries *, as they have since been to every other inquirer, for the third *Nacshatra*. If any doubt existed, Mythology might assist in determining the question; for the *Crĭttĭcás* are six nymphs, who nursed Scanda, the God of war, named from these, his foster mothers, Cá'rtice'ya or Sha'nma'tura.

IV. We retain on our celestial globes the Arabick name of the fourth lunar mansion *Debarán* (or with the article, Aldebaran): applied by us, however, exclusively to the bright star called the Bull's-eye; and which is unquestionably the same with the principal and eastern star of *Rohin'i*, placed in $4\frac{1}{2}°$ or 5° S. and $49\frac{1}{2}°$ E. by the Hindu writers on Astronomy. This *Nacshatra*, figured as a wheeled carriage, comprises five stars, out of the seven which the Greeks named the Hyades. The Arabs, however, like the Hindus, reckon five stars only in the asterism; and Sir W. Jones rightly supposed them to be in the head and neck of the Bull: they probably are $\alpha\ \rho\ \gamma\ \delta\ \varepsilon$ Tauri, agreeably to Mons. Bailly's conjecture (Ast. Ind. p. 129).

* Costard's Hist. of Ast. p. 51. Bailly Ast. Ind. p. 134.

Hindu astronomers define a point in this constellation, of some importance in their fanciful astrology. According to the *Surya sidd'hánta*, when a planet is in the 7th degree of *Vřisha* (Taurus) and has more than two degrees of south latitude, or, as commentators expound the passage, 2° 40′; the planet is said to cut the cart of *Rohini*. This is denominated *sacat'abhéda*, or the section of the wain. LALLA and the *Grahalághava* give nearly the same definition; and it is added in the work last mentioned, that, when Mars, Saturn and the Moon are in that position (which occurs, in regard to the moon, when the node is eight *nacshatras* distant from *Punarvasu*, and might happen in regard to the rest during another *Yuga*), the world is involved in great calamity. Accordingly, the *Puranas* contain a legendary story of *Dasarat'ha's* dissuading *Saturn* from so traversing the constellation *Rohini*.

V. *Mřigásiras* the fifth *Nacshatra*, represented by an antelope's head, contains three stars; the same which constitute the fifth lunar mansion *Hakâh*; for the distance of 10° S. assigned to the northern star of this *Nacshatra*, will agree with no other but one of the three in the head of Orion. The difference of longitude (24° to $25\frac{1}{2}$°) from *Crĭttica* corresponds with sufficient exactness; and so does the longitude of its circle of declination (62° to 63°) from the end of *Revati*; since the true longitude of λ Orionis, from the principal star in *Revati* (ζ Piscium), is $63\frac{1}{2}$°. It was a mistake to suppose this asterism to comprise stars in the feet of Gemini, or in the Galaxy (As. Res. vol. 2. p. 298).

VI. *Ardra*, the sixth *Nacshatra*, consists of a single bright star, described as a gem, and placed in 9° S. by one authority, but in 11° by others, and at the distance of $4\frac{1}{3}$° to 4° in longitude from the last asterism. This indicates the star in the shoulder of Orion (α Orionis);

not, as was conjectured by SIR WILLIAM JONES, the star in the knee of Pollux (As. Res. 2. p. 298).

THE sixth lunar mansion is named by the Arabs, *Hanah*; and comprises two stars in the feet of the second twin, according to ULUGH BEG, though others make it to be his shoulder (HYDE, Com. p. 7. and 44). MUHAMMED of *Tizin* allots five stars to this constellation; and the *Kamus*, among various meanings of *Hanah*, says, that it is a name for five stars in the left arm of Orion; remarking, also, that the lunar mansion is named *Tahayi*, comprising three stars called *Tahyat*. Either way however, the Indian and Arabian asterisms appear in this instance irreconcileable.

VII. THE seventh *Nacshatra*, entitled *Punarvasu*, and represented by a house, or, according to a *Sanscrit* work cited by SIR WILLIAM JONES (As. Res. v. 2. p. 295), a bow, is stated by astronomers as including four stars, among which the principal and eastern one is 30° or 32° from the fifth asterism; but placed by all authorities in 6° N. This agrees with (β Geminorum) one of the two stars in the heads of the twins, which together constitute the seventh lunar mansion *Ziraa*, according to MUHAMMED of *Tusi* and MUHAMMED of *Tizin* and other Arabian authorities (HYDE on ULUGH BEG, p. 43).

IT appears from a rule of *Sanscrit* grammar *, that *Punarvasu*, as a name for a constellation, is properly dual, implying, as it may be supposed, two stars. On this ground, a conjecture may be raised, that *Punarvasu* originally comprised two stars, though four are now assigned to it. Accordingly, that number is retained in the *Sacalya sanhita*.

* PANINI I. ii. 63.

It may be further observed, that the seventh lunar mansion of the Arabs is named *Ziraâ ul ased* according to *Juhari* and others cited by Hyde (Com. on Ulugh beg, p. 44); and that the *Kamus* makes this term to be the name of eight stars in the form of a bow.

Upon the whole, the agreement of the Indian and Arabian constellations is here apparent, notwithstanding a variation in the number of the stars; and I conclude, that *Punarvasu* comprises, conformably with Sir William Jones's supposition (As. Res. vol. 2. p. 299), stars in the heads of the twins; viz. α, β, Geminorum; and which were indicated to Dr. Hunter by a Hindu astronomer at *Ujjayin*; to which, perhaps, θ and τ may be added to complete the number of four.

VIII. *Pushya*, the eighth asterism, is described as an arrow; and consists of three stars, the chief of which, being also the middlemost, has no latitude, and is 12° or 13° distant from the seventh asterism, being placed by *Hindu* astronomers in 106° of longitude. This is evidently Cancri; and does not differ widely from the eighth lunar mansion *Nethrah*, which, according to Ulugh beg and others (Hyde's Com. p. 45), consists of two stars, including the nebula of Cancer. The Indian constellation comprises two other stars, besides δ Cancri, which are perhaps γ and β of the same constellation; and Sir William Jones's conjecture, that it consists of stars in the body and claws of Cancer, was not far from the truth.

IX. The ninth asterism, *A's'lésha*, contains five stars figured as a potter's wheel, and of which the principal or eastern one is placed in 7° S. and, according to different tables, 107°, 108°, or 109°, E. This appears to be intended for the bright star in the southern claw of Cancer (α Cancri,) and cannot be reconciled with the lunar mansion *Tarf* or *Tarfah*,

which comprises two stars (HYDE's Com. p. 8.) near the lion's eye; the northernmost being placed by MUHAMMED of *Tízín* in 24° of N. declination (HYDE's Com. p. 101). The Jesuit missionaries, if rightly quoted by COSTARD (Hist. of Astr. p. 51) made *Aś'léshá* correspond with the bright stars in the heads of Castor and Pollux, together with Procyon." This is evidently erroneous. SIR WILLIAM JONES's supposition, that *Aś'léshá* might answer to the face and name of Leo, nearly concurs with the Arabian determination of this lunar mansion, but disagrees with the place assigned to the stars by Hindu astronomers. BAILLY committed the same mistake, when he affirmed, that *Aś'léshá* is the Lion's head. (Astr. Ind. p. 328).

X. THE tenth asterism *Mag'ha* contains, like the last, five stars; but which are figured as a house. The principal or southern one has no latitude, and, according to all authorities, has 129° longitude. This is evidently Regulus (α Leonis): which is exactly $129\frac{20}{3}$ distant from the last star in *Révati*.

ACCORDING to the Jesuits cited by COSTARD, *Mag'ha* answers to the lion's mane and heart; and the tenth lunar mansion of the Arabians, *Jebhah*, comprises three (some say four) stars, nearly in the longitude of the Lion's heart (HYDE's ULUGH BEG, p. 74. and Com. p. 46). In this instance, therefore, the Indian and Arabian divisions of the Zodiack coincide: and it is owing to an oversight, that SIR WILLIAM JONES states the *Nacshatra* as composed of stars in the Lion's leg and haunch. It appears to consist of α γ ζ η and ν Leonis.

XI. Two stars, constituting the eleventh *Nacshatra*, or preceding *Phalguní*, which is represented by a couch or bedstead, are determined by the place of the chief star (the northernmost according to the *Surya sidd'*-

hanta) in 12° N. and 144° E. or, according to BRAHMEGUPTA, the *Siróman'i* and the *Grahalag'hava* 147° or 148° E. They are probably δ and θ Leonis; the same which form the lunar mansion *Zubrah* or *Khertan* (HYDE's ULUGH BEG, p. 76. and Com. p. 47).

IT may be conjectured, that BRAHMEGUPTA and BHA'SCARA selected the southern for the principal star; while the *Surya sidd'hanta* took the northern: hence the latitude, stated by those several *Hindu* authorities, is the mean between both stars; and the difference of longitude, compared to the preceding and subsequent asterisms, may be exactly reconciled upon this supposition.

XII. Two other stars, constituting the twelfth *Nacshatra*, or following *P'halguni*, which is likewise figured as a bed, are ascertained by the place of one of them (the northernmost) in 13° N. and 155° E. This indicates β Leonis; the same which singly constitutes the Arabian lunar mansion *S'erfah* (HYDE's ULUGH BEG, p. 78. and Com. p. 47.), though MUHAMMED of *Tizin* seems to hint that it consists of more than one star (HYDE, p. 102). By an error regarding the origin of the ecliptick on the Indian sphere, SIR WILLIAM JONES refers to the preceding *Nacshatra*, the principal star of this asterism.

XIII. *Hasta*, the thirteenth *Nacshatra*, has the name and figure of a hand; and is suitably made to contain five stars. The principal one, towards the west, next to the north-western star, is placed according to all authorities in 11° S. and 170° E. This can only belong to the constellation Corvus: and accordingly five stars in that constellation (α β γ δ ε Corvi), have been pointed out to me by Hindu astronomers for this *Nacshatra*.

Awwa, the thirteenth lunar mansion of the Arabs, is described as containing the same number of stars, situated under Virgo, and so disposed as to resemble the letter Alif. They are placed by ULUGH BEG in the wing (HYDE's ULUGH BEG, p. 80).

IN this instance the Indian and Arabian divisions of the Zodiack have nothing in common but the number of stars and their agreement of longitude. It appears, however, from a passage cited from SUFI by HYDE (Com. p. 82), that the Arabs have also considered the constellation of Corvus as a mansion of the moon.)

XIV. The fourteenth *Nacshatra*, figured as a pearl, is a single star named *Chitra*. It is placed by the *Surya sidd'hanta* in 2° S. and 180° E; and by BRAHMEGUPTA, the *Sirómani* and *Graha Lag'hava*, in $1\frac{30}{4}$° or 2° S. and 183° E. This agrees with the virgin's spike (α Virginis;) and *Hindu* astronomers have always pointed out that star for *Chitra*. The same star constitutes the fourteenth lunar mansion of the Arabs, named from it *Simac ul aázil*. LE GENTIL's conjecture *, that the fourteenth *nacshatra* comprises the two stars δ and ε Virginis was entirely erroneous. And MONS. BAILLY was equally incorrect in placing θ Virginis in the middle of this asterism (Astr. Ind. p. 227).

XV. ANOTHER single star constitutes the fifteenth *Nacshatra*. *Swati*, represented by a coral bead. The *Surya sidd'hanta*, BRAHMEGUPTA, the *Siromani* and *Graha lag'hava*, concur in placing it in 37° N. They differ one degree in the longitude of its circle of declination; three of these authorities making it 199°, and the other 198°.

THE only conspicuous star, nearly in the situation thus assigned to *Swati*, (and the Indian astronomers

* BAILLY Ast. Ind. p. 227.

would hardly travel so far from the Zodiack to seek an obscure star;) is Arcturus, 33° N. of the ecliptick in the circle of declination, and 198° E. from the principal star of *Révati*. I am therefore disposed to believe, that *Swati* has been rightly indicated to me by a native astronomer who pointed out Arcturus for this *Nacshatra*. The longitude, stated by MUN'IS'WARA (viz. $1\frac{1}{2}$° less than *Chitra*), indicates the same star: but, if greater reliance be placed on his latitudes, the star intended may be ε *Bootis*. At all events, MONS. BAILLY mistook, when he asserted, on the authority of LE GENTIL, that the fifteenth *Nacshatra* is marked by α Virginis; and that this star is situated at the beginning of the *Nacshatra* (Ast. Ind. p. 139 and 227).

THE Indian asterism totally disagrees with the lunar mansion *Ghafr*, consisting of three stars in the Virgin's foot, according to ULUGH BEG (HYDE, p. 82. and Com. p. 50); but in, or near, the balance, according to others (ibid).

XVI. *Visac'ha*, the sixteenth *Nacshatra*, consists of four stars described as a festoon. Authorities differ little as to the situation of the principal and northernmost star: placing it in 1°, 1° 20′, or 1° 30′ S. and in 212°, 212° 5′ or 213° E. The latitude seems to indicate the bright star in the southern scale (α Libræ), though the longitude disagree; for this suggests a remote star (possibly κ Libræ). I apprehend the first to be nearest the truth; and hence conclude the four stars to be α ν ι Libræ and γ Scorpii.

THE sixteenth lunar mansion named *Zubanah* or *Zubaniyah*, is according to MUHAMMED of *Tizin* (HYDE, Com. 104), the bright star in the northern scale (β Libræ), which SIR WILLIAM JONES supposed to be the fifteenth *Nacshatra*.

FATHER SOUCIET, by whom Corona Borealis is

stated for the asterism *Visac'ha*, is censured by Sir W. Jones, under an impression, that all the *Nacshatras* must be sought within the Zodiack. The information, received by Father Souciet, does appear to have been erroneous; but the same mistake was committed by a native astronomer, who showed to me the same constellation for *Visác'há*; and the *Nacshatras* are certainly not restricted to the neighbourhood of the ecliptick.

XVII. Four stars, (or, according to a different reading, three,) described as a row of oblations, that is, in a right line, constitute the seventeenth *Nacshatra* named *Anurád'há*. Here also, authorities differ little as to the situation of the chief and middlemost star; which is placed in 3°, or 2°, or 1° 45′ S. and in 224° or 224° 5′ E. This must intend the star near the head of the scorpion (δ Scorpionis); and the asterism probably comprises β δ π and ρ Scorpionis.

The seventeenth lunar mansion of the Arabs called *Iclil* or *Iclilu'jebhah*, contains four (some say three, and others six *,) stars lying in a straight line. Those, assigned by Ulugh Beg (Hyde, p. 87.) for this mansion, are β δ ν π Scorpionis.

Here the Indian and Arabian divisions appear to concur exactly; and Sir W. Jones (As. Res. 2. p. 299), as well as the Missionaries cited by Costard (Hist. Astr. p. 51), have apparently understood the same stars; though the latter extend the *Nacshatra* to the constellation Serpentarius.

XVIII. *Jyés'ht'ha*, the eighteenth *Nacshatra*, comprises three stars figured as a ring. In regard to this,

* Hyde's Com. p. 51.

also, authorities are nearly agreed in the position of the principal and middlemost star, placed in 4°, $3\frac{1}{2}$°, or 3° S. and in 229°, 229° 5′, or 230° E. This position clearly indicates Antares or the Scorpion's heart (α Scorpionis); which is also the eighteenth lunar mansion named *Kalb* or *Kalbul'âkrab*. The three stars of the Indian asterism may be α σ & τ Scorpionis.

XIX. The nineteenth asterism, *Múla*, represented by a Lion's tail, contains eleven stars, of which the characteristick one, the easternmost, is placed in 9°, $8\frac{1}{2}$° or 8° S. and in 241° or 242° E. Although the latitude of υ Scorpionis be five degrees too great, there seems little doubt, that either that, or the star east of it marked ν, must be intended; and this determination agrees with the 18th lunar mansion of the Arabs called *Shaulah*, consisting of two stars near the scorpion's sting. The Hindu asterism probably includes all the stars placed by us in the Scorpion's tail, viz. ε μ ζ η θ ι κ λ υ and ν Scorpionis.

XX. The twentieth *Nacshatra*, entitled preceding *A'shád'ha*, figured as an elephant's tooth, or as a couch, cossists of two stars, of which the most northern one is placed in $5\frac{1}{2}$° $5\frac{1}{3}$° or 5° S. and 254° or 255° E. This suits with δ Sagittarii, which is also one of the stars of the twentieth lunar mansion called *Nâaim*. It consists of four, or, according to some authorities, of eight, stars. The Indian asterism seemingly comprises δ & ε Sagittarii.

XXI. Two stars constitute the twenty-first asterism, named the subsequent *A'shád'ha*, which is represented by a couch or by an elephant's tooth. The principal star, which also is the most northerly one, is placed in 5° S. and 260°, or 261° E. This agrees with a star in the body of Sagittarius (τ Sagittarii), and the other star is perhaps the one marked ζ.

THE twenty-first lunar mansion of the Arabians, named *Baldah*, comprises six stars, two of which are placed by MUHAMMED of *Tizin* in Declination 21° & 16°. One of these must be a star in the head of Sagittarius. Some authors, on the contrary, describe the lunar mansion as destitute of stars (HYDE, Com. on ULUGH BEG, p. 9.) At all events, the Hindu and Arabian divisions appear, in this instance, to be but imperfectly reconcileable.

XXII. THREE stars, figured as a triangle, or as the nut of the floating Trapa, form the twenty-second asterism, named *Abhijit*; which, in the modern Indian astronomy, does not occupy an equal portion of the ecliptick with the other *Nácshatras*, but is carved out of the contiguous divisions. Its place (meaning that of its brightest star) is very remote from the Zodiack; being in 60° or 62° N. The longitude of its circle of declination, according to different authorities, is 265°, 206° 40′, or 268°. Probably the bright star in the Lyre is meant. It was shown to DR. HUNTER, at *Ujjayini* for the chief star in *Abhijit*; and the same was pointed out to me, for the asterism, by a Hindu astronomer at this place.

THE Arabian lunar mansion *Zábih*, consists of two stars (some reckon four *) in the horns of Capricorn, totally disagreeing with the Indian *Nacshatra*.

XXIII. *S'ravan'á*, the twenty-third *Nacshatra*, represented by three footsteps, contains three stars, of which one, the middlemost, is by all authorities placed in 30° N. but they differ as to its longitude; the *Surya sidd'hánta* placing it in 280°; BRAHMEGUPTA and the *S'irómani*, in 278°; and the *Grahaláig'hava* in 275°.

* ULUGH BEG, p. 94. and HYDE's Com. 54.

The assigned latitude indicates the bright star in the eagle, whence the three may be inferred to be $\alpha\,\beta$ and γ Aquilæ.

The twenty-third mansion of the moon, called by the Arabs *Bakà*, consists of two stars in the left hand of Aquarius. Consequently the Arabian and Hindu divisions are here at variance.

XXIV. *D'hanish't'há*, the twenty-fourth asterism, is represented by a drum or tabor. It comprises four stars, one of which (the westernmost) is placed in 36° N. and, according to the *Surya sidd'hánta*, Brahmegupta and the *Siróman'i*, in 290° E. though the *Grahalág'hava* state 286° only. This longitude of the circle of declination, and the distance of the star on it from the ecliptick, indicate the Dolphin; and the four stars probably are $\alpha\,\beta\,\gamma$ and δ Delphini. The same constellation is mentioned by the Jesuit missionaries as corresponding to *D'hanish't'há* (Costard, p. 51): and there can be little doubt, that the ascertainment is correct. The longitude, stated by Mun'is'wara, (viz. 294° 12′) supports the conclusion, though his latitude (26° 25′) be too small. To determine accurately the position of this *Nacshatra* is important, as the solstitial colure, according to the ancient astronomers, passed through the extremity of it, and through the middle of *As'lésha*.

The twenty-fourth mansion, called by the Arabs *Sâud*, comprises two stars in Aquarius (β and ξ Aquarii); totally disagreeing with the Hindu division.

XXV. *Satabhishá*, the twenty-fifth *Nacshatra*, is a cluster of a hundred stars figured by a circle. The principal one, or brightest, has no latitude; or only a third, or at the utmost half, a degree of south latitude; and all the tables concur in placing it in long. 320°.

This will suit best with λ Aquarii. These hundred stars may be sought in the stream from the Jar, where Sir William Jones places the *Nacshatra*; and in the right leg of Aquarius.

Akhbiyah, the twenty-fifth lunar mansion, is stated to consist of three stars only, which seem to be the three in the wrist of the right hand of Aquarius (Hyde's Com. p. 55). However, it appears from Ulugh Beg's tables, as well as from Muhammed of *Tizin's*, that four stars are assigned to this mansion (Hyde, p. 99. and Com. p. 95.)

The Hindu and Arabian asterisms differ, here less widely, than in the instances lately noticed: and a passage, cited by Hyde from Firozabadi, even intimates the circular figure of the constellation (Com. p. 10).

XXVI. The twenty-sixth of the Indian asterisms, called the preceding *Bhádrapada*, consists of two stars represented by a couch or bed, or else by a double headed figure; one of which is placed by Hindu astronomers in 24° N. and 325° or 326° E. The only conspicuous star, nearly in that situation, is the bright star in Pegasus (α Pegasi); and the other may be the nearest consideration (ζ Pegasi). I should have considered β Pegasi to be the second star of this *Nacshatra*, were not its *yóga* or chief star expressly said to be the most northerly. *Mukaddim*, the 26th lunar mansion, consists of the two brightest stars in Pegasus (α and β *); and thus the two divisions of the Zodiack nearly concur.

XXVII. Two other stars constitute the 27th lunar mansion named the subsequent *Bhadrapada*. They are figured as a twin, or person with a dou-

* Hyde's Ulugh Beg, p. 53, and Com. p. 34.

ble face, or else as a couch. The position of one of them (the most northerly) is stated in 26° or 27° N. and 337° E. I suppose the bright star in the head of Andromeda to be meant; and the other star to be the one in the extremity of the wing of Pegasus (γ Pegasi). This agrees exactly with the 27th lunar mansion of the Arabians, called *Muakkher*. For ULUGH BEG assigns those stars to it (HYDE, p. 53. Com. p. 34. and 35.)

XXVIII. THE last of the twenty-eight asterisms is named *Révati*, and comprises thirty-two stars figured as a tabor. All authorities agree, that the principal star, which should be the southernmost, has no latitude, and two of them assert no longitude; but some make it ten minutes short of the origin of the ecliptick, viz. 359° 50′. This clearly marks the star on the ecliptick in the string of the fishes (ζ Piscium); and the ascertainment of it is important in regard to the adjustment of the *Hindu* sphere.

THE Arabick name of the 28th mansion, *Risha*, signifying a cord, seems to indicate a star nearly in the same position. But the constellation, as described by JUHARI cited by GOLIUS, consists of a multitude of stars in the shape of a fish, and termed *Betnu'lhut*; in the navel of which is the lunar mansion: and MUHAMMED of *Tizin*, with some others, also makes this lunar mansion to be the same with *Betnu'lhut*, which appears, however, to be the bright star in the girdle of Andromeda (β Andromedæ); though others describe it as the northern fish, extending, however, to the horns of the ram (HYDE's Com. p. 10, 35, and 96). The lunar mansion and Indian asterism are, therefore, not reconcileable in this last instance.

THE result of the comparison shows, I hope satisfactorily, that the Indian asterisms, which mark the divisions of the ecliptick, generally consist of nearly the same stars, which constitute the lunar mansions of

the Arabians: but, in a few instances, they essentially differ. The Hindus have likewise adopted the division of the Ecliptick and Zodiack into twelve signs or constellations, agreeing in figure and designation with those of the Greeks; and differing merely in the place of the constellations, which are carried on the Indian sphere a few degrees further west than on the Grecian. That the *Hindus* took the hint of this mode of dividing the ecliptick from the Greeks, is not perhaps altogether improbable: but, if such be the origin of it, they have not implicitly received the arrangement suggested to them, but have reconciled and adapted it to their own ancient distribution of the ecliptick into twenty-seven parts *.

In like manner, they may have either received or given the hint of an armillary sphere as an instrument for astronomical observation: but certainly they have not copied the instrument which was described by Ptolemy; for the construction differs considerably.

In the Arabick Epitome of the Almagest entitled *Tahriru'lmejesti* †, the armillary sphere *(Zat ul halk)* is thus described. "Two equal circles are placed at right angles; the one representing the ecliptick, the other the solstitial colure. Two pins pass through the poles of the ecliptick; and two other pins are placed on the poles of the equator. On the two first pins, are suspended a couple of circles, moving the one within,

* According to the longitude of the three brightest stars of Aries, as stated by Ptolemy, viz. 10° 40′, 7° 40′ and 6° 40′, (I quote from an Arabick epitome of the Almagest); the origin of the ecliptick, in the Greek book which is most likely to have become known in India, is 6° 20′ from the star which the *Hindus* have selected to mark the commencement of the ecliptick.

† By the celebrated Nasiruddin Tusi; from the Arabick version of Is'hak bin Hunen, which was revised by Thabit.

the other without, the first mentioned circles, and representing two secondaries of the ecliptick. On the two other pins a circle is placed, which encompasses the whole instrument, and within which the different circles turn: it represents the meridian. Within the inner secondary of the ecliptick a circle is fitted to it, in the same plane, and turning in it. This is adapted to measure latitudes. To this internal circle, two apertures, or sights, opposite to each other, and without its plane, are adapted, like the sights of an instrument for altitudes. The armillary sphere is complete when consisting of these six circles. The ecliptick and secondaries are to be graduated as minutely as may be practicable. It is best to place both secondaries, as by some directed, within the ecliptick, (instead of placing one of them without it,) that the complete revolution of the outer secondary may not be obstructed by the pins at the poles of the equator. The Meridian, likewise, should be doubled, or made to consist of two circles; the external one graduated, and the internal one moving within it. Thus the pole may be adjusted at its proper elevation above the horizon of any place. The instrument so constructed consists of seven circles.

"It is remarked, that when the circle, representing the meridian, is placed in the plane of the true meridian, so that it cuts the plane of the horizon at right angles, and one of the poles of the equator is elevated above the horizon conformably with the latitude of the place; then the motions of all the circles round the poles represent the motions of the universe.

"After rectifying the meridian, if it be wished to observe the sun and moon together, the outer secondary of the ecliptick must be made to intersect the ecliptick at the sun's place for that time; and the solstitial colure must be moved until the place of intersection be opposite to the sun. Both circles are thus adjusted to their true places; or if any other object, but the

sun, be observed, the colure is turned, until the object be seen in its proper place, on that secondary referred to the ecliptick; the circle representing the ecliptick, being at the same time in the plane of the true ecliptick and in its proper situation. Afterwards, the inner secondary is turned towards the moon (or to any star intended to be observed), and the smaller circle within it, bearing the two sights, is turned, until the moon (or to any star intended to be observed), and the smaller circle within it, bearing the two sights, is turned, until the moon be seen in the line of the apertures. The intersection of the secondary circle and ecliptick is the place of the moon in longitude; and the arc of the secondary, between the aperture and the ecliptick, is the latitude of the moon on either side (North or South)."

The same instrument, as described by Montucla from the text of Ptolemy (l. 3. c. 2.*), consists of six circles: first, a large circle representing the meridian; next, four circles united together, representing the equator, ecliptick and two colures, and turning within the first circle on the poles of the equator; lastly, a circle turning on the poles of the ecliptick, furnished with sights and nearly touching, on its concave side, the circumference of the ecliptick.

The armillary sphere, described by the Arabian epitomiser, differs, therefore, from Ptolemy's, in omitting the equator and equinoctial colure, and adding an inner secondary of the ecliptick, which, as well as the meridian, is doubled.

According to Lalande, the astrolabe of Ptolemy, from which Tycho Brahe derived his equatorial armillary, consisted only of four circles: two placed at right angles to represent the ecliptick and

* Hist. des Mathem. 1. p. 301.

solstitial colure; a third turning on the poles of the ecliptick and serving to mark longitudes; and a fourth, within the other three, furnished with sights to observe celestial objects and measure their latitudes and longitudes *.

Whether the ancient Greeks had any more complicated instrument formed on similar principles, and applicable to astronomical observations, is perhaps uncertain. We have no detailed description of the instrument, which Archimedes is said to have devised to represent the phenomena and motions of the heavenly bodies; nor any sufficient hint of its coustruction †; nor does Cicero's account of the sphere exhibited by Posidonius ‡ suggest a distinct notion of its structure.

Among the Arabs, no addition is at present known to have been made to the Armillary sphere, between the period when the Almagest was translated §, and the time of Alhazen, who wrote a treatise of optics, in

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* Lalande Astron. I. 13. (§ 2279).

† If Claudian's epigram on the subject of it was founded upon any authority, the instrument must have been a sort of orrery, enclosed in glass.

Vide Claud. epig. Cicero. Tusc. Quæs. I. 1 Nat. Deo. 2. 35.

‡ Cic. Nat. Deo. 2. 34.

§ In the *Hejira* year 212, or A. D. 827, by Alhazen ben Yusef with the aid of Sergius (Montucla, 2. p. 304); or rather by Ishak ben Honen, whose death is placed about the *Hejira* year 260 (D'Herbelot, p. 455). According to the *Cashfulzun*, Ishak's version was epitomised by Hajai ben Yusef, by Thabit ben Karrah, and by Nasiruddin Tusi. Other versions, however, are mentioned: particularly, one by Hajab, said to have been corrected first by Hunen ben Ishak, and afterwards by Thabit; another by Thabit himself; and a third by Muhí ben Yahyah. A different account is likewise given of the earliest translation of the *Almagest*, which is ascribed to Abu Hisan and Salman, who are said to have completed it, after the failure of other learned men, who had previously attempted the translation. Mention is also

which a more complicated instrument, than that of PTOLEMY, is described. ALHAZEN's armillary sphere is stated to have been the prototype of TYCHO BRAHE's *; but neither the original treatise, nor the Latin translation of it, are here procurable; and I am therefore unable to ascertain whether the sphere, mentioned by the Arabian author, resembled that described by Indian astronomers. At all events, he is more modern †, than the oldest of the Hindu writers whom I shall proceed to quote ‡.

THE construction of the Armillary sphere is briefly and rather obscurely taught in the *Surya sidd'hanta*. The following is a literal translation.

"LET the astronomer frame the surprising structure of the terrestrial and celestial spheres.

"HAVING caused a wooden globe to be made, [of such size] as he pleases, to represent the earth; with a staff for the axis, passing through the center, and

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made of a version by IBRAHIM BEN SALAT, revised by HUBEN. But none of these translations are anterior to the 9th century of the Christian era.

* Adhibuit (Tycho) Armillare quoddam instrumentum, quod tamen comperi ego positum, et adhibitum olim fuisse ante Tychonem ab Alhazeno, lib. 7. opt. C. 1. prop. 15 et à Vitell. lib. 10. propos. 49. cujus instrumenti astronomicè collocati ope, atque usu, (vide instrumentum multiplex armillare apud Tycho, in Mechanicis Astronomiæ) eandem elevationem falsam 9 scrupulorum invenit, quam per alia, duo diversa instrumenta, compererat.

Bestini Apiaria.

† He wrote his treatise on opticks and other works about the year 1190. *Biog. Dict.*

‡ BHASCARA flourished in the middle of the twelfth century; being born, as he himself informs us, in the *Saca* year 1063, answering to A. D. 1114. But the *Surya Sidd'hánta* is more ancient.

exceeding the globe at both ends; let him place the supporting hoops *, as also the equinoctial circle.

"THREE circles must be prepared, (divided for signs and degrees,) the radius of which must agree with the respective diurnal circles, in proportion to the equinoctial: the three circles should be placed for the Ram and following signs, respectively, at the proper declination in degrees, N. or S.; the same answer contrariwise for the Crab and other signs. In like manner, three circles are placed in the southern hemisphere, for the Balance and the rest, and contrariwise for Capricorn and the remaining signs. Circles are similarly placed on both hoops for the asterisms in both hemispheres, as also for *Abhijit*; and for the seven *Rĭshis*, *Agastya*, *Brahme* and other stars.

"IN the middle of all these circles is placed the equinoctial. At the intersection of that and the supporting hoops, and distant from each other half the signs, the two equinoxes should be determined; and the two solstices, at the degrees of obliquity from the equinoctial; and the places of the Ram and the rest, in the order of the signs, should be adjusted by the strings of the curve. Another circle, thus passing from equinox to equinox, is named the ecliptick; and by this path, the sun, illuminating worlds, for ever travels. The moon and the other planets are seen deviating from their nodes in the ecliptick, to the extent of their respective greatest latitudes [within the Zodiack]."

THE author proceeds to notice the relation of the great circles before mentioned to the horizon; and observes, that, whatever place be assumed for the apex of the sphere, the middle of the heavens for that

* They are the Colures.

place is its horizon. He concludes by showing, that the instrument may be made to revolve with regularity, by means of a current water; and hints, that the appearance of spontaneous motion may be given, by a concealed mechanism, for which quicksilver is to be employed. The manner of using this instrument for astronomical observations has been already explained (p. 326).

More ample instructions for framing an armillary sphere are delivered in the *Sidd'hánta s'iróman'i*. The passage is too long for insertion in this place; and I reserve it for a separate article, on account of the explanations which it requires, and because it leads to the considerations of other topicks *, which cannot be sufficiently discussed in the present essay. A brief abstract of Bha'scara's description may here suffice. In the center he places a small globe to represent the earth encompassed with circles for the orbits of the planets arranged like the curved lines in a spider's web. On an axis passing through the poles of the earth, and prolonged on both sides, a sphere, or assemblage of circles, is suspended, by means of rings or tubes adapted to the axis, so that the sphere may move freely on it. This assemblage of circles comprises a horizon and equator adjusted for the place, with a prime vertical meridian, and two intermediate verticals (intersecting the horizon at the N. E. and S. W. and N. W. and S. E points); as also the equinoctial colure.

* Among others, that of the precession of the equinoxes; respecting which different opinions are stated by Bhascara. It appears from what is said by him, that the notion of a libration of the equinoxes has not universally prevailed among *Hindu* astronomers. The correcter opinion of a revolution of the equinoctial points was advanced by some authors, but has not obtained the general suffrage of *Hindu* writers on astronomy.

S. Rousseau, *Printer, Wood Street, Spa Fields.*

Another circle is suspended within this sphere on the poles of the horizon, apparently intended to measure the altitude and amplitude of an object.

ANOTHER sphere or assemblage of circles is in like manner suspended on the pole of the equator. It consists of both colures, and the equinoctial, with the ecliptick adjusted to it; and six circles for the planetary orbits adjusted to the ecliptick; as also six diurnal circles parallel to the equinoctial, and passing through the extremities of the several signs.

THIS, though not a complete description of BHA'SCARA'S armillary sphere, will convey a sufficient notion of the instrument for the purpose of the present comparison; and will justify the remark, that its construction differs greatly from that of the instrument specified by PTOLEMY.

IN the description of the armillary sphere cited from the *Súrya sidd'hánta*, mention is made of several stars not included in the asterisms which mark the divisions of the ecliptick. The following table exhibits the positions of those, and of the few other stars which have been particularly noticed by *Hindu* astronomers.

	Brahme sidd'hánta and *Sirómaní*.		*Graha Lág'hava*.		*S. Sárvabhauma*.		*Súrya Sidd'hánta*.	
	Lat.	Long.	Lat.	Long.	Lat.	Long.	Lat.	Long.
Agastya, -	77° S.	87°	6° S.	80°	77° 16 S.	85° 5	80° S.	90°
Lubd'haca, or the hunter,	40° S.	86°	40° S.	81°	40° 4 S.	84° 36	40° S.	80°
Agni - - -			8° N.	53°	8° 14 N.	57° 4	8° N.	52°
Brahmehridaya			31° N.	46°	30° 49 N.	58° 36	30° N.	52° †
Prajápati or *Brahma*			39° N.	61°	38° 38 N.	56° 53	38° N.	57°
Apámvatsa			3° N.	183°	3 N.	183°	3° N.	180°
Apas							9 N.	180°

† The *Sícalya sanhitá* and *Tatwa viveca* agree with the *Súrya sidd'hánta* as to the positions of the first four stars. They omit the other three.

The seven *Rishis*	According to the *Sácalya Sanhitá.* Lat.
Cratu	55° N.
Pulaha	50° N.
Pulastya	50° N.
Atri	56° N.
Angiras	57° N.
Vasisht'ha	60° N.
Maríchi	60° N.

Here *Agastya* is evidently Canopus; as *Lubd'haca* is Sirius. *Brahmeridaya* seems to be Capella, which was shown, under that Indian name, to Dr. Hunter at *Ujjayiní*. *Agni* may be the bright star in the northern horn of the bull (β Tauri): *Prajápati* is perhaps the star on the head of the waggoner (δ Aurigæ). The distances of the three last mentioned stars from the ecliptick do not exactly agree with the places stated; but no conspicuous stars are found nearer to the assigned positions: and it may be remarked, that they are all nearly in the longitude of the *Nacshatra Mriga-s'iras* corresponding to the head of Orion; and that the latitude, assigned to them by Hindu astronomers, is as much too small, as that of *Mrigas'iras* is too great.

The star, mentioned in the *Súrya sidd'hánta* under the name of *A'pas* or water, is doubtless δ Virginis; and *Apámvatsa* comprises the nebulous stars in the same constellation, marked b 1. 2. 3.

Astronomers gives rules for computing the heliacal rising and setting of the star *Agastya*, on account of certain religious ceremonies to be performed when that star appears. Vara'ha Mihira says, "*Agastya* is

visible at *Ujjayini*, when the sun is 7° short of the sign Virgo." But he afterwards adds, that "the star becomes visible, when the sun reaches *Hasta*, and disappears when the sun arrives at *Róhiní*." His commentator remarks, that the author has here followed earlier writers; and quotes PARA'SARA saying, "When the sun is in *Hasta*, the star rises; and it sets when the sun is in *Róhiní* *." BHATTÓTPALA cites from the five *Sid-d'hántas* a rule of computation, analogous to that, which will be forthwith quoted from the *Bháswatí*; and remarks, that three periods of *Agastya's* heliacal rising are observed, viz. 8th and 15th of *As'wina* and 8th of *Cártica*.

THE *Bháswatí* directs the day of *Agastya's* rising for any particular latitude to be fouud by the following rule. 'The length of the shadow of a gnomon † at a particular latitude, on the day of the equinox, is multiplied by 25; and to the product 900 are added; the sum, divided by 225, gives in signs and degrees the place of the sun, on the day, when *Agastya* rises or appears in the south, at the close of night.' The commentator adds, that 'the day of the star's setting may be computed by deducting the sum found as above, from 1350; the difference reduced to signs and degrees, is the place of the sun, on the day, when *Agastya* sets in the southwest.' According to these rules, *Agastya* in latitude 26° 34′, rises when the sun is in 4^{s} 20° and sets when the sun is in 1^{s} 10°.

The *Grahaláग'hava* teaches another method of calculation. The length of the shadow of the gnomon is multiplied by 8, and the product is

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* दृश्यतेसकिलहस्तगतेकेरोहिणीमुपगतेसमपैति.

† In duodecimal parts.

added to 98 for the sun's place in degrees, on the day when *Agastya* rises; or is deducted from 78, to find the sun's place when that star sets. By this rule, the star should rise, in latitude 26° 34′, when the sun is at the 26th degree of the lion, and should set when the sun quits the ram. Accordingly, the *Bhavishya* and the *Brahmevaivarta Puránas* ordain oblations for *Agastya* three days before the sun reaches the Zodiacal sign Virgo; though the inhabitants of the province of *Gaura*, as observed in the last mentioned *Puráṇa*, perform this ceremony three days earlier.

In regard to the passages above quoted, it may be remarked, that the rule, stated in the *Bháswati*, implies the distance of three signs, from the beginning of Aries, to *Agastya*, and supposes the star to become visible when distant one sign from the sun. But the rule, delivered in the *Grahaláǵ'hava*, places the star at the distance of 88° from the beginning of *Mésha*, and supposes it visible in the right sphere, when 10° distant from the sun. According to the quotation from Paráśara, the right ascension of the star must have been, in his time, not less than 100° reckoned from the beginning of *Mésha*; and the star, rising cosmically, became visible in the oblique sphere, at the distance of 60° from the sun; and disappeared, setting achronically, when within that distance. Making allowance therefore for the star's proper motion, and change of declination and right ascension, it remains probable, that Paráśara's rule was framed for the north of India, at a period when the solstitial points were, as stated by that author, in the middle of *Asleshá* and beginning of *Dhanisht'ha* *.

I have purposely reserved for separate consideration the seven *Rishis*, who give name to seven stars in Ursa

* As. Res. vol. 2. p. 393.

major; not only because their positions are not stated by BRAHMEGUPTA, BHA'SCARA, and the *Súryasid-d'hánta*, but also because the authors, who give their positions, ascribe to them a particular motion, or variation of longitude, different from other stars, and apparently unconnected with the precession of the equinoxes.

VARA'HA MIHIRA has a chapter in the *Várahisanhitá* expressly on the subject of this supposed motion of the *Rishis*. He begins by announcing the intention of stating their revolution conformably with the doctrine of VRĬDD'HA GARGA, and proceeds as follows: "When king YUD'HIST'HIRA ruled the earth, the *Munis* were in *Maghá*, and the period of the era of that king is 2526 years. They remain for a hundred years in each asterism, being connected with that particular *Nacshatra*, to which, when it rises in the east, the line of their rising is directed *."

THE commentator, BHATTÓTPALA, supports the text of his author by quotations from VRĬDD'HA GARGA and CA'S'YAPA. "At the junction of the *Cali* and *Dwápar* ages, says GARGA, "the virtuous sages, who delight in protecting the people, stood at the asterism, over which the *Pitris* preside." That is at *Maghá*. "The mighty sages," says CA'S'YAPA, "abide during

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* आसन्मघासु मुनयः शासति पृथ्वीं युधिष्ठिरे नृपतौ। षड्दिकपंचद्वियुतः शककालस्तस्य राज्यस्य॥ एकैकस्मिन्नक्षत्रे शतं शतं ते चरन्ति वर्षाणाम्॥ प्राग्दयनो ऽरुन्धतिकः सप्तर्षयः

According to a different reading noticed by the commentator, the concluding hemistich signifies "they constantly rise in the north-east; together with ARUND'HATÍ."

प्राग्दयनश्चैते सदोदयंते सरुंधतीकाः

a hundred years in each asterism, attended by the virtuous ARUND'HATÍ."

THE author next states the relative situation of the seven *Rĭshis*, with ARUND'HATÍ near her husband VASISHT'HA: and the remainder of the Chapter is devoted to astrology.

THE revolution of the seven *Rĭshis*, and its periods, are noticed in *Puránas*. The following passage is from the *Srí Bhágavata* *.

"FROM your birth (PARICSHIT is addressed by SU'CA) to the inauguration of NANDA, 1115 years will elapse.

"OF the seven *Rishis*, two are first perceived, rising in the sky; and the asterism, which is observed to be at night even with the middle of those stars, is that, with which the *Rishis* are united, and they remain so during a hundred years of men. In your time, and at this moment, they are situated in *Maghá*.

"WHEN the splendor of VISHNU, named CRĬSHNA, departed for heaven, then did the *Cali* age, during which men delight in sin, invade the world. So long as he continued to touch the earth with his holy feet; so long the *Cali* age was unable to subdue the world.

"WHEN the seven *Rishis* were in *Maghá*, the *Cali* age comprising 1200 [divine] years † began; and when, from *Maghá*, they shall reach *Purvásháḍ'ha*, then will this *Cali* age attain its growth under NANDA and his successors."

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* Book 12. C. 2.

† 432000 common years.

THE commentator SRI'D'HARA SWA'MI remarks, that the constellation, consisting of seven stars, is in the form of a wheeled carriage. MARI'CHI, he observes, is at the extremity; and next to him, VASISHT'HA in the arched part of the yoke; and beyond him ANGIRAS: next to whom are four stars in a quadrangle: ATRI at the northeast corner; south of him PULASTYA; next to whom is PULAHA; and CRATU is north of the last. Such being their relative position, the two stars, which rise first, are PULAHA and CRATU; and whichever asterism, is in a line south from the middle of those stars, is that with which the seven *Rĭshis* are united; and they so remain for 100 years.

A SIMILAR passage is found in the *Vishnu Purána* *, and a similar exposition of it is given by the commentator RATNAGARBHA: but the period, there stated to elapse between the birth of PARICSHIT and the inauguration of NANDA, is 1015 years only.

THE *Matsya Purána* contains a passage to the like effect; but allows 1050 years from the birth of PARICSHIT to the inauguration of MAHA'PADMA: and the seven *Rĭshis* are stated as being in a line with the constellation sacred to fire (that is *Crĭttiká*), 836 years later, in the time of the *Andhra* kings.

IN the *Brahme sidd'hánta* of SA'CALYA, denominated from its reputed author *Sácalya sanhitá*, the supposed motion of the seven *Rĭshis* is thus noticed †: "At the commencemeat of the *yuga*, CRATU was near the star sacred to VISHNU *(Sravaná)*, at the beginning of the asterism. Three degrees east of him, was PULAHA; and PULASTYA, at ten degrees

* Part 4. Ch. 23. v. 32. &c.
† *Prasna* 2. ch. 2.

from this; ATRI followed at three degrees from the last; and ANGIRAS, at eight degrees from him; next came VAS'ISHT'HA, at the distance of seven degrees; and lastly MARÍCHI at ten. Their motion is eight *liptas* (minutes) in a year. Their distances from the ecliptick, north, were respectively 55°, 50°, 50°, 56°, 57°, 60°, and 60°. For, moving in the north into different positions, the sages employ 2700 years in revolving through the assemblage of asterisms: and hence their positions may be easily known at any particular time."

LALLA, cited by MUNÍS'WARA in his gloss on the *Siróman*i, says "If the number of years of the *Cali* age, less fourteen, be divided by 100, the quotient, as the wise declare, shows the asterisms traversed by MARÍCHI and other celestial sages, beginning from the asterism of *Viranchi* (BRAHMA)."

HERE LALLA is generally understood to mean *Róhiní*, which is sacred to *Prajápati* (or *Brahmá*). But MUNÍS'WARA has remarked, in another place, that LALLA may intend *Abhijit* which is sacred to *Vid'hi* or *Brahma*; and consequently may mean *S'ravaní*, of which *Abhijit* forms a part: and thus LALLA and SA'CALYA may be reconciled.

MOST of the commentators on the *Súrya sidd'hánta* and *Siróman*i are silent on the subject of the seven *Rĭshis*. But NRĬSINHA, in his *Vártica* to the *Vásaná Bháshya* or gloss on the *Siróman'i*, quotes and expounds the *Sácalya Sanhitá*, and rejects VARA'HA's rule of computation, as disagreeing with *Puráni'as*. MUNÍS'WARA, in his commentary on the *Siróman'i*, cites some of the passages above noticed, and remarks, that BHA'SCARA has omitted this topick on account of contradictory opinions concerning it, and because it is of no great use.

The same author, in his own compilation entitled *Sidd'hánta Sárvabhauma*, has entered more fully into this subject. He observes, that the seven *Rĭshis* are not, like other stars, attached by spikes to the solid ring of the ecliptick, but revolve in small circles round the northern pole of the ecliptick, moving by their own power in the etherial sphere above Saturn, but below the sphere of the stars. He places the *Rĭshis* in the same relative positions, which Sa'calya had assigned to them; states in other terms the same distances from the ecliptick, and the same annual motion; and directs their place to be computed by deducting 600 from the years of the *Cali* age, doubling the remainder and dividing by fifteen: the quotient, in degrees, is divided by 30, to reduce it into signs. Munís'wara supports this mode of calculation on the authority of Sa'calya, against Vara'ha mihira and Lalla; and affirms, that it agrees with the phenomena, as observable at the period of his compilation. It appears, however, to be a correction of Sa'calya's rule.

Camala'cara, in the *Tatwavivéca*, notices the opinion delivered in the *Sidd'hanta Sárvabhauma*; but observes, that no such motion of the stars is perceptible. Remarking, however, that the authority of the *Purán'as* and *Sanhitás*, which affirm their revolution, is incontrovertible, he reconciles faith and experience by saying, that the stars themselves are fixed; but the seven *Rĭshis* are invisible deities, who perform the stated revolution in the period specified.

If Camala'cara's notion be adopted, no difficulty remains: yet it can hardly be supposed, that Vara'ha mihira and Lalla intended to describe revolutions of invisible beings. If then it be allowed, that they have attributed to the stars themselves an imaginary revolution grounded on an erroneous theory, a probable inference may be thence drawn as to the period when those authors lived, provided one position be con-

ceded: namely, that the rules, stated by them, gave a result not grossly wrong at the respective periods when they wrote. Indeed it can scarcely be supposed, that authors, who, like the celebrated astronomers in question, were not mere compilers and transcribers, should have exhibited rules of computation, which did not approach to the truth, at the very period when they were proposed.

If this reasoning be admitted, it would follow, that Varáha mihira composed the *Várahí sanhitá* about 2800 years after the period assigned by him to the commencement of the reign of Yudhisht'hira, or near the close of the third century after the expiration of Yudhisht'hira's era as defined by him. For the circle of declination passing between Cratu and Pulaha (the two first of the seven *Ríshis)*, and cutting the ecliptick only 2° short of the beginning of *Maghâ*, was the solstitial colure, when the equinox was near the beginning of *Críttică*; and such probably was the reason of that line being noticed by ancient Hindu astronomers. It agrees with the solistitial colure on the sphere of Eudoxus, as described by Hipparchus *. A similar circle of declination, passing between the same stars, intersected the ecliptick at the beginning of

* Hipparchus tells us, that Eudoxus drew the colure of the solstices, through the middle of the Great Bear; and the middle of Cancer; and the neck of Hydrus; and the star between the poop and mast of Argo; and the tail of the South Fish; and through the middle of Capricorn, and of Sagitta; and through the neck and right-wing of the Swan; and the left-hand of Cepheus: and that he drew the equinoctial colure through the left-hand of Arctophylax; and along the middle of his body; and cross the middle of Chelæ; and through the right-hand and fore-knee of the Centaur; and through the flexure of Eridanus and head of Cetus; and the back of Aries across, and through the head and right-hand of Perseus." Sir I. Newton's *Chronology*, §. 29. *Hipparch. ad Phœnom. in Petavii Uranologia*, p. 207, 208. Bailly, *Ast. Anc.* p. 506. Costard, p. 136.

Maghá when the solstitial colure was at the middle of *Aslésha*; and a like circle passed through the next asterism, when the equinox corresponded with the first point of *Mésha*. An astronomer of that period, if he were apprized of the position assigned to the same stars by GARGA reputed to have been the priest of CRĬSHNA and the *Pándus*, might conclude with VARA'HA MIHIRA, that one revolution had been completed, and that the stars had passed through one *Nacshatra* of the second revolution. In corroboration of this inference respecting the age of VARA'HA MIHIRA's astrological treatise, it may be added, that he is cited by name in the *Pancha tantra*, the original of the fables of *Pilpay*, which were translated for NUSHIRVA'N more than 1200 years ago *.

THE theory being wholly unfounded, VARA'HA MIHIRA's rule of computation soon ceased to agree with the phenomena, and other rules have been successively introduced by different authors, as LALLA, SA'CALYA and lastly MUNÍS'WARA; whose rule, devised less than two hundred years ago, does not yet grossly betray its insufficiency.

THIS pretended revolution of the stars of Ursa Major is connected with two remarkable epochas in Indian chronology; the commencement of the *Cali yuga*, or sinful age, in the reign of YUD'HISHT'HIRA; and its prevalence, on the failure of the succession of *Cshatriya* princes, and establishment of a different dynasty, 1015 years after the birth of PARICSHIT, according to the *Vishnu Purána*; or 1115 years, according to the *Bhágavata*; but 1498 years, if a correction, which has been proposed by SRÍD'HARA SWAMI and some other commentators, be admitted. This subject has

* PREFACE to the Sanscrit edition of the *Hitópadesa*, p. xi.

been already noticed by Capt. WILFORD in his essay on VICRAMA'DITYA; and it is, therefore, unnecessary to enlarge upon it in this place.

It has been noticed, towards the beginning of the present essay, that the principal star of each *Nacshatra*, is denominated *Yogatárá*. Perhaps it may not be superfluous to caution the reader against confounding these *yoga* stars with the *yogas*, of which a list is inserted in Sir W. JONES's Treatise on the Indian Zodiack *. They are mentioned by him as divisions of the ecliptick: but it will presently appear, that they cannot in strictness be so denominated. Their principal purpose regards astrology; but they are also employed in regulating certain moveable feasts; and they are of such frequent use, that every Indian Almanack contains a column specifying the *yoga* for each day, with the hour of its termination.

THE *yoga* is nothing else than a mode of indicating the sum of the longitudes of the sun and moon. The rule for its computation, as given in the *Súrya Sid-d'hánta*, *Bháswati* and *Graha lág'hava*, directs, that the longitude of the sun be added to the longitude of the moon; and the sum, reduced to minutes, is to be divided by 800 (the number of minutes in 13° 20′): the quotient exhibits the elapsed *yogas*, counted from *Vishcumbha* †. It is obvious therefore, that the *yogas* are twenty-seven divisions of 360° of a great circle, mea-

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* As. Res. vol. 2, p. 302.

† 1 Vishcumbha. 2 Príti. 3 Ayushmat. 4 Saubhágya. 5 Sóbhana. 6 Atiganda. 7 Sucarman. 8 Dhriti. 9 Súla. 10 Ganda. 11 Vridd'hi. 12 Dhruva. 13 Vyágháta. 14 Hershana. 15 Vajra. 16 Sidd'hi. 17 Vyatipáta. 18 Varíyas. 19 Parigha. 20 Siva. 21 Sidd'ha. 22 Sádhya. 23 Subha. 24 Sucla. 25 Brahman. 26 Aindra. 27 Vaidhriti.

sured upon the ecliptick. But, if they be represented on a circle, it must be a moveable one in the plane of the ecliptick.

Astologers also reckon twenty-eight *yogas*, which correspond to the twenty-eight *Nacshatras* or divisions of the moon's path; varying, however, according to the day of the week. As the Indian Almanacks sometimes appropriate a column to the moon's *yoga* for each day, I shall insert in a note a list of these *yogas*, with the rule by which they are determined *.

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* 1 Ananda. 2 Cáladanda. 3 Dhúmra. 4 Prajápati. 5 Saumya. 6 Dhwáncsha. 7 Dhwaja. 8 Srívatsa. 9 Vajra. 10 Mudgara. 11 Ch'hatra. 12 Maitra. 13 Mánasa. 14 Padma. 15 Lambuca. 16 Utpáta. 17 Mrityu. 18 Cána. 19 Sidd'hi. 20 Subha. 21 Amrita. 22 Musula, 23 Gada. 24 Mátanga. 25 Rácshasa. 26 Chara. 27 St'hira. 28 Pravard'ha.

The foregoing list is extracted from the *Ratnamálá* of Srípati. He adds the rule by which the *yógas* are regulated. On a Sunday, the *Nacshatras* answer to the *yógas*, in their natural order; viz. *Aswini* to *Ananda*, *Bharani* to *Cálandanda*, &c. But, on a Monday, the first *yóga (Ananda)* corresponds to *Mrigasiras*, the sesond to *Ardrá*, and so forth. On a Tuesday, the *Nacshatra*, which answers to the first *yóga*, is *Asleshá*; on Wednesday, *Hasta*; on Thursday, *Anurád'ha*; on Friday, *Uttaráshád'da*; and on Saturday, *Satabhishá*.

Almanacks usually contain another set of astrological divisions of the lunar month, which it may be proper to explain. They are denominated *Carana*; and consist of seven variable and four invariable, as in the subjoined list.

Variable *Caranas*.	Invariable *Caranas*.
1 Bava.	1 Sacuni.
2 Bálava.	2 Chatushpád.
3 Caulava.	3 Nága.
4 Taitila.	4 Cintughna.
5 Gara.	
6 Vanij.	
7 Vishti.	

ANOTHER topick, relative to the Zodiack, and connected with astrology, remains to be noticed. I allude to the *Dréshcánas* answering to the Decani of European Astrologers. The *Hindus*, like the Egyptians and Babylonians, from whom that vain science passed to the Greeks and Romans, divide each sign into three parts, and allot to every such part a regent exercising planetary influence under the particular planet whom he there represents.

THE description of the 36 *Dréshcanás* is given towards the close of VARA'HAMIHIRA's treatise on the casting of nativities, entitled *Vrihat Játaca*. It is here translated conformably with the gloss of BHATTÓTPALA: omitting, however, some variations in the reading of the text, which are noticed by him; but which can be of no use, unless occasion should arise for reference to them in comparing the description of the *Dréshcánas* with some amulet or ancient monument in which the Decani may be supposed to be figured. Even for that purpose, the following description will probably suffice.

1. [MARS] A man with red eyes, girt round the waist, with a white cloth, of a black complexion, as formidable as able to protect, holds a raised battle-axe.

2. [THE SUN] A female clad in red apparel, with her mind fixed on wearing ornaments, having a mare's head, and a belly like a jar, thirsty and

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They answer successively to half a *Ti'thi* or lunar day; *Cintughna* being always assigned to the first half of the first *Ti'thi*; and the variable *Caranas* afterwards succeeding each other regularly, through eight repetitions: they are followed by the three remaining invariable *Caranas*; which conclude the month; *Chatuhpád* and *Nága* appertaining to *Amávasyá* or the new moon, and *Sacuni* being appropriated to the latter half of the preceding *Tit'hi*.

resting on one foot, is exhibited by YAVANA as the figure of the *Dréshcána* in the middle of *Mésha* *.

3. [JUPITER] A fierce and wrathful man, conversant with arts, of a tawny complexion, solicitous of action, but unsteady in his resolves, holds in his hands a raised stick, and wears red clothes. He is the third in the tripatite division of *Mésha*.

4. [VENUS] A woman with hair clipped and curled, a body shaped like a jar, her clothes burnt, herself thirsty, disposed to eat, and fond of ornaments: such is the figure of the first in *Vrishabha*.

5. [MERCURY] A man with the head of a goat, and a shoulder like a bull, clothed in dirty apparel, skilful in regard to the plough and the cart, acquainted with field, grain, house, and kine, conversant with arts; and, in disposition, voracious.

6. [SATURN] A man with a body vast as an elephant's, and feet great as a *Sarabha's* †, with white teeth and a tawny body, his mind busied upon the wool of wild sheep, occupies the extremity of the sign Taurus.

7. [MERCURY] Such as are conversant with the subject, declare the first in the tripartite partition of the third sign, to be a woman fond of working with the needle, beautiful, delighting in ornaments, childless, amorous, and with her arms elevated.

8. [VENUS] In the middle of the sign Gemini is a man, with the face

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* मेषमध्ये द्रेष्काण नृर्पंयवनोपदिष्टं॥ BHATTÓTPALA expounds this "declared by YAVANACHARYA" यवनाचार्यैः कथितम्

† A monster with eight legs, who destroys elephants.

of a *Garud'a* *, standing in a grove: he is an archer clad in armour, and holds a bow, he meditates on sport, his children, ornaments, and wealth.

9. [Saturn] At the end of the sign Gemini is a man decorated with ornaments, having as many gems as the ocean contains; clad in armour and furnished with bow and quiver; skilled in dance, musick, and song, and practising poetry.

10. [The Moon] The wise declare the first in Cancer to be an animal with the body of an elephant, the feet of a *Sarabha*, a boar's head and horse's neck, standing in a grove under a Sandal-wood tree †, and upholding leaves, root, and fruit.

11. [Mars] In the middle of the sign Cancer, a woman, in prime of youth, with blossoms of lotos on her head, attended by a serpent, cries, while standing in a forest, resting against the branch of a *Palása* ‡ tree.

12. [Jupiter] Last in Cancer is a man with his head inclined; he is decorated with golden ornaments, and, embarking on a vessel and encompassed by serpents [twined round him,] he traverses the ocean to seek ornaments for his wife.

13. [The Sun] A vulture and shakal stand on a cotton tree §: a dog is near: and a man, in a squalid dress, laments for his father and mother: this representation is pronounced to be the first of the Lion.

14. [Jupiter] A man formed like a horse, bearing on his head a garland of yellowish white flowers, wears a leather dress: unconquered like a Lion; armed with

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* An eagle: or else a gigantick crane, Perhaps a vulture.
† Santalum Album sive Sirium myrtifolium.
‡ Butea frondosa.
§ Bombax heptaphyllum.

a bow; and distinguished by a hooked nose, he is placed in the middle of Leo.

15. [MARS] The third in the tripartite division of Leo, is a man having the head of a bear, with a long beard and curled hair; in disposition similar to an ape; and holding a staff, fruits, and flesh.

16. [MERCURY] A damsel, bearing a jar filled with blossoms, (her person clothed in apparel soiled with dirt,) solicitous for the union of dress with opulence, is going towards the family of her spiritual parent: such is the first of Virgo.

17. [SATURN] A man of a dark complexion, with a cloth on his head, holds a pen, and is casting up accounts of receipts and disbursements: he bears a large bow, and his body is covered with hair: he is placed in the middle of the sign.

18. [VENUS] A woman of a fair complexion, dressed in bleached silk, tall, holding in her hand a jar and ladle; is devoutly going towards a temple of the gods: the wise pronounce this to be the last of Virgo.

19. [VENUS] A man is proceeding along the middle of a highway; holding a balance, and having weights in his hand; he is skilled in measuring and meting, and meditates on commodities and their prices. The *Yavanas* declare this form to be first of Libra *.

20. [SATURN] A man with the head of a vulture, carrying a water pot, is anxious to proceed, being hungry and thirsty; in thought, he visits his wife and son. He is middlemost of the balance-bearer (Libra.)

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* तद्रूपंवदंतियवनाः प्रथमंतुलाधाः This might signify "YAVANA declares;" for the plural is used in Sanscrit respectfully: and *Bhattótpala* has before expounded यवन as intending YAVANACHARYA: but a different explanation occurs a little lower.

21. [MERCURY] A man, in figure like an ape, adorned with gems, bearing a golden quiver and armour, and carrying fruits and flesh, is scaring deer, in a forest: such is the figure exhibited by the *Yavanas* *.

22. [MARS] A woman, without clothes or ornaments, comes from the great ocean, to the shore; she has fallen from her place; round her feet are serpents entwined; but she is pleasing. Such is the first of the sign Scorpio.

23. [JUPITER] A woman, with a body like a tortoise and a jar, and with serpents entwined round her person, is solicitous to prepare local comforts for her husband. This figure the wise pronounce to be the middle one of Scorpio.

24. [THE MOON] The last of the Scorpion is a lion with a large and stooping head resembling that of a tortoise; he guards the place where Sandal-wood grows, terrifying dogs, deer, boars, and shakals.

25. [JUPITER] An animal with the body of a horse and head of a man, holding a large bow, stands near a hermitage and devoutly guards the implements of sacrifice: such is the first of the three divisions of the bow (Sagittarius.)

26. [MARS] A pleasing female, of golden complexion like the *Champaca* †, moderately handsome, sits on a throne, distributing marine gems. This is described as the middle division of the bow.

27. [THE SUN] A man with a long beard, of a com-

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* यवनैरुदाहृतः Which BHATTOTPALA expounds "declared by the ancient *Yavanas*." पुराणयवनैः

† Michelia Champaca.

plexion yellow like the *Champaca*, is sitting on a throne with a staff in his hand: he wears silk raiment and a deer's skin. Such is the third figure of the ninth sign.

28. [Saturn] A man, of a terrible aspect, with the body of a hog, hairy, having tusks like a *Macara* *, holds a yoke, a net, and fetters. He is first of Capricorn.

29. [Venus] In the middle of *Macara* is a woman skilled in musick, with eyes large like the petals of the lotos, and with a dark complexion. She seeks various things: she is decorated with jewels; and wears metallick ornaments in her ears.

30. [Mercury] A man, shaped like a *Cinnara* †, clothed in a woolen cloth, and furnished with quiver, bow, and armour, bears on his shoulder a jar adorned with gems: he is last of the sign *Macara*.

31. [Tae Sun] The first of the jar (Aquarius) is a man with the head of a vulture, clothed in silk and wearing an antolope's hide with a woolen cloth: his mind is busied in obtaining oil, ardent spirits, water, and food.

32. [Mercury] In a burnt carriage, a woman clad in soiled apparel, bearing vessels on her head, is collecting metals in a forest containing cotton trees.

33. [Venus] A man of a dark complexion, with hairy ears, adorned with a diadem, carries and transports vases with articles of metal, and with bark, leaves, gum, and fruit. He is last of *Cumbha*.

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* A sea monster. Perhaps the Narwhal may be intended.
† A human figure with the head of a horse.

34. [JUPITER] The first of the fish [Pisces] navigates the sea in search of ornaments for his wife: he has jewels, and his hands are full of vessels used in sacrifice, together with pearls, gems, and shells.

35. [THE MOON] A woman, surpassing in complexion the blossom of the *Champaca*, ascends a ship with lofty masts and flags; and approaches the shore of the sea, accompanied by her retinue. This is declared by sages to be the second in the tripartite division of *Mína*.

36. [MARS] Near a cavern, in a forest, a naked man, with serpents entwined round his body, and tormented by robbers and fire, laments. He is the last of the fish.

ARABIAN astronomers in like manner divide each sign of the Zodiack into three parts, denominated *Wajeh* (وجه) or in the plural *Wujuh* (وجوه), which severally belong to the different planets * thence called *Rab ul wajeh*. The proper import of the term وجه is face or countenance; agreeing with the Greek Προσωπον, which is similarly employed in this acceptation †.

THE near correspondence of the *Darésh'cán'as* with the Decani of Roman authors and δεκανοι of Grecian writers will be evident from the following passage of MANILIUS, supported by quotations from other authors, which I shall insert on the faith of SAUMAISE ‡; the original works, from which they are taken, not being here procurable.

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* In the following order, beginning from Aries: viz Mars, the Sun, Venus, Mercury, the Moon, Saturn, Jupiter, Mars, the Sun, &c. *Ikhwánu'l Safá.*

† Firmici Mathesis seu Astron. vide infra.

‡ Salmasii Plinianæ Exercitationes, p. 652.

MANILIUS says *

> Quam partem decimam dixêre Decania gentes;
> A numero nomen positum est, quòd partibus astra
> Condita tricenis propriâ sub sorte feruntur,
> Et tribuunt denas in se coeuntibus astris,
> Inque vicem terris habitantur sidera Signis.

HEPHÆSTION expressly declares †, that "each sign of the Zodiack is divided into three Decani comprising ten degrees each: the first division of Aries is named *Chontare*; the second *Chontachre*, and the third *Sicet*."

FIRMICUS differs in the names, and does not allow ten complete degrees to each Decanus. Thus, in the sign Aries, the three first degrees are, according to him, unappropriated; the five next belong to the first Decanus *Asitan*, the next nine are vacant; and the four following appertain to the second Decanus *Senacher*: five degrees are again unoccupied; and the four last belong to the third Decanus *Sentacher* ‡.

WE learn from PSELLUS § that the several Decani were figured with different attributes and dresses; and, from DEMOPHILUS and FIRMICUS ‖ that they represented the planets. The first appertained to Mars;

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* Lib. 4. 298—302.

† Καὶ ἔστιν ὁ μὲν πρῶτος χοιλαρὲ, ὁ δὲ δεύτερος, ὁ τρίτος σικέτ.

‡ Salmasii Plin. Exerc. p. 653.

§ Εισί γαρ εν ἑκάστω των ζωδίων τρεῖς καλειλεγμενοι δεκανοὶ ποικιλόμορφοι, ὁ μεν κατεχων πελεκυν, ὁ δ' εις ἄλλο τι εσχηματισμενος εικασμα. ων εἰ τὰ ειδη ἢ τὰ σχήματα δακτυλίων εγγλύψεις σφενδοναις ἀποτροπαια δεινῶν φανησεται. Ταῦτα μεν ουν ὁ Τεῦκρος κατ' εκεινον περιτροι τα μετεωρα.

‖ Primum προσωπον est is planeta cujus signum est: secundum προσωπον planeta sequens: et sic deinceps. Aries est Martis primum προσώπον, secundum Solis, tertium Veneris, juxta seriem errantium. This agrees precisely with the Arabian وجه

the second to the Sun; and the third to Venus (the Hindu author says Jupiter).

THIS astrological notion was confessedly received from foreign nations. The doctrine seems to be ascribed by FIRMICUS to NEKEPSO king of *Egypt* *; and PSELLUS cites a Babylonian author, whom he calls TEUCER; and who is also noticed by PORPHYRIUS: besides, the names of the Decani, stated by HEPHÆSTION and FIRMICUS, are decidedly barbarous. It was not, therefore, without reason, that SAUMAISE and KIRCHER sought a derivation of the word Decanus itself from a foreign language. It cannot be deduced, as SCALIGER proposes, from the similar term for an inferior officer commanding ten men †; since this office and its designation were first introduced later than the time of MANILIUS, by whom the astrological term is employed; and PORPHYRIUS expressly affirms that the word was used by those whom he denominates "ancients ‡." HUET, not concurring in either of the opinions abovementioned, supposes the term to have been corruptly formed by the astrologers of *Alexandria* from the Greek numeral with a Latin termination §. If this be admitted, it still remains not improbable that some affinity of sound, in the Egyptian or in the Chaldaick name, may have suggested the formation of this corrupt word.

THE *Sanscrit* name apparently comes from the same source. I do not suppose it to be originally *Sanscrit*; since, in that language, it bears no etymological signification. For the same reason, it is likely, that the astrological doctrine itself may be exotick in India.

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* Sic et Nekepso Ægypti justissimus Imperator, et Astrologus valde bonus, per ipsos Decanos omnia vitia valetudinesque collegit, ostendens quam valetudinem quis Decanus efficeret, &c.

† Erant Decani deni milites propositi. *Veget.* 2. 8.

‡ Ὀυς τινας εκαλεσαν δεκανους οἱ παλαιοι.

§ Huetii animadversiones ad Manilium. Lib. iv. v. 198.

One branch of astrology, entitled *Tájaca*, has been confessedly borrowed from the Arabians: and the technical terms used in it, are, as I am informed by Hindu astrologers, Arabick. The casting of nativities, though its practice is of more ancient date in India, may also have been received from Western astrologers; Egyptians, Chaldeans, or even Greeks. If so, it is likely, that the Hindus may have received astronomical hints at the same time.

By their own acknowledgment *, they have cultivated astronomy for the sake of astrology; and they may have done so, with the aid of hints received from the same quarter, from which their astrology is derived. In the present instance Vara'ha mihira himself, as interpreted by his commentator, quotes the *Yavanas* (meaning perhaps Grecian authors), in a manner which indicates, that the description of the *Dréshcánas* is borrowed from them.

The name of Yavana'cha'rya, who is cited by Bhattótpala, would not be alone decisive. He is frequently quoted by *Hindu* astronomers: and it is possible, though by no means certain, that, under this name, a Grecian or an Arabian author may be intended. To determine that point, it will be requisite (unless the work attributed to him be recovered) to collect all the passages, in which Yavan'acha'rya is cited by Sanscrit authors; and to compare the doctrines ascribed to him with those of the Grecian and Arabian writers on Astronomy. Not being prepared for such a disquisition, I shall dismiss this subject, for the present, without offering any positive opinion on the question, which has been here proposed.

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* Bhascara expressly says, "By ancient astronomers, the purpose of the science is declared to be judicial astrology; and that, indeed, depends on the influence of configurations; and these, on the apparent places of the planets."

Gólád'hyáya. 1. v. 6.

VII.

On Olibanum *or* Frankincense.

BY H. T. COLEBROOKE, ESQ.

It is generally agreed, that the Gum-resin, called Olibanum, is the Frankincense which was used by the Ancients in their religious ceremonies. But there is not the same agreement as to the plant supposed to produce it. Linnæus has referred it to a species of Juniper *: and accordingly botanists of his school †, and the Chemical writers ‡, concur in affirming, that Olibanum is the produce of the Lycian Juniper. But this tree is a native of the south of France, as well as the Levant and Siberia: and the French Botanists deny, that it yields the resinous Gum in question §; and remark, that Linnæus made the assertion without proof. Their remark is, I believe, well founded. No proof appears to have been alledged; and both Niebuhr and Bruce considered it as an undecided question, which they endeavoured, though unsuccessfully, to investigate ‖. I therefore apprehended, that the evidence,

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* His pupil Gahn, in a treatise on officinal plants, written and published in 1753, and inserted in Fund. Bot. vol. 2, has so stated it, without specifying the species. This was probably grounded on the Materia Medica of Linnæus published in 1749. Murray cites that work of Linnæus, for the observation, that it is yet uncertain whether Olibanum be produced from the Juniperus Lycia. Appar. Medic. T. 1. p. 55.

† Martyn's Botan. Dict.

‡ Fourcroy, Syst. Chim. T. 8. p. 30. Thompson, 4. p. 344.

§ Les botanistes ignorent quel est l'árbre d'où découle cette résine précieuse. Linnæus a avancé, sans preuve, qu'elle étoit produite par une espèce de genevrier.

Dict. D'Hist. Nat. published in 1803.

‖ Niebuhr says, "We could learn nothing of the tree, from which incense distils; and Mr. Forskal does not mention it. I know, that it is to be found in a part of Hadramaut, where it is called Oliban." (Eng. Transl. vol. 2. p. 356.)

which will be adduced for a different tree, is not opposed to any arguments of strength in favour of the Lycian Juniper.

A great degree of obscurity has always hung over this subject. We learn from THEOPHRASTUS and from PLINY *, that the Greek writers differed in their description of the tree; PLINY adds, that the information contained in the volume addressed by King JUBA to C. CÆSAR, grandson and adopted son of AUGUSTUS, was inconsistent with other accounts; and further remarks, that the Ambassadors, who came to Rome from Arabia in his own time, had rendered the whole matter more uncertain than ever. The information, obtained in modern times from Arabia, is not more satisfactory.

OLIBANUM is named *Lubán* and *Cundur* by the Arabs. But, Benzoin having been introduced into general use, as incense, in place of Olibanum, the name of *Lubán* has been appropriated to that fragrant balsam, and the Muhammedan writers of India, on Materia Medica, apply only the term *Cundur* to Olibanum. The author of the *Mekhzenuladviyeh*, under this head, states *Cundur* as Arabick, or according to other opinions Persian, and equivalent to the Syriack *Labúniyá* (لبونيا.) He describes the drug as the gum of a thorny plant, a yard high, with leaves and seed resembling the myrtle. It grows, he says, on the mountains of Shahar and Yemen. He, however, adds, that the plant is said to be found in some parts of India. The *Tohfut ul muminin* gives a similar description (excepting the remark last quoted;) and so does the Arabian author ABULFADLI cited by the French translator of PLINY †.

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* Pliny, 12. 14. Theophrastus Hist. Plant. 9. 2.
† Poinsinet. Paris 1771. tom. 4. p. 532.

From the Hebrew *Lebonah* or Arabick *Lubán*, the Greeks obtained their names for the tree and the gum, *Libanos* and *Libanotos*. They seem likewise to have been acquainted with the term of *Cundur*, from which κονδρος is probably derived.

The Hindu writers on Materia Medica notice a fragrant resinous gum, under the name of *Cunduru*, which their grammarians consider as a Sanscrit word, and accordingly state an etymology of it from a Sanscrit root. They concur in declaring it to be the produce of the *Sallací*, a tree which they affirm to be vulgarly called *Sálaï*. The tree, which is known by that name, was examined by Dr. Hunter on his journey to *Ujjayini*; and by me on a journey to *Nágpur*: and it has been figured and described by Dr. Roxburgh, who has named it Boswellia Serrata. His description follows.

Boswellia Serrata, Roxb.

Gen. Char. Calyx beneath, 5—toothed. Corol 5 petaled. Nectary a crenulated, fleshy cup, surrounding the lower part of the germ, with stamens inserted on its outside. Capsule 3—sided, 3—celled, 3—valved. Seeds solitary, membrane-winged.

Spec. Char. Leaves pinnate; leaflets serrate, downy. Racemes simple, axillary. Petals ovate. Filaments inserted on the exterior margin of the nectary.

A large tree, a native of the mountains of India. A most fragrant resin is collected from wounds made in the bark, &c.

Leaves crowded about the extremities of the branchlets, pinnate with a single terminal one.

Leaflets sessile, sometimes opposite, sometimes alternate, in general about 10 pair, obliquely-ovate, oblong, obtuse, serrate, villous; length about an inch, or an inch and a half.

Petioles round, downy.

Racemes axillary, simple, shorter than the leaves, downy.

Bracts minute.

Flowers numerous, very pale pink, small.

Calyx five lobed *, downy.

Corol, petals five, oblong, expanding, downy on the outside, and considerably longer than the stamens.

Nectary, a fleshy crenulated cup †, surrounding the lower two-thirds of the germ.

Stamens: Filaments ten, alternately shorter ‡, inserted on the outer edge of the mouth of the nectary. Anthers oblong.

Pistil. Germ above, ovate. Style cylindric. Stigma of three pretty large lobes.

Pericarp: Capsule oblong, three-sided, three-celled, three-valved, size of an olive, smooth.

Seed solitary, winged, broad-cordate, at the base deeply emarginate, point long and slender, and by it inserted into the apex of the valve of the Capsule to which it belongs.

The foregoing description is by Dr. Roxburgh. I have merely added in the margin a few inconsiderable variations taken from Dr. Hunter's notes or from my own.

The fructification is remarkably diversified on the same plant. I have found, even on the same raceme, flowers in which the teeth or lobes of the Calyx

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* So Dr. Roxburgh. But Perianth 1-leaved, 5-toothed; according to Dr. Hunter's observations and my own.

† Coloured and adhering to the Calyx.

‡ Subulate and alternately slender.

varied from 4 to 10. The number was generally 5, sometimes 6, rarely 7, more rarely 4, and very rarely 10. Petals as many as the divisions of the Calyx. Stamens twice as many. Capsule generally 3 sided, sometimes 4, rarely 5, sided; with as many cells and as many valves. Seeds generally solitary: the dissection of germ does indeed exhibit a few in each cell; but only one is usually matured.

The tree is frequent in the forest between the *Sóne* and *Nágpúr*; on the route by which I travelled to *Berar* in 1798. The gum, which exudes from it, was noticed by Mr. D. Turnbull, who was then Surgeon to the residency at *Nágpúr*. He judged it to be Olibanum; and so did several intelligent natives who accompanied us. But the notion, prevalent among botanists, that Olibanum is the produce of a species of juniper, left room for doubt. I now learn from Mr. Turnbull, that, since his return to his station at *Mirzápúr*, he has procured considerable quantities of the gum of the *Sálai*, which he has sent to Europe at different times; first without assigning the name of Olibanum; and, more lately, under that designation. It was in *England* recognised for Olibanum, though offered for sale as a different gum; and annual consignments of it have been since regularly sold at the East India Company's sales.

The experience of several years at a market such as that of London, where a mistake (had any been committed) would have been soon discovered, seems to be conclusive. I might, however, add to it the testimony of medical gentlemen at this place, by whom specimens of the Gums furnished by Mr. Turnbull have been inspected, and who concur in opinion, that the Gum appears to be the same with the Olibanum of the shops,

Upon this evidence so corroborated, I shall venture to propose the following statement of Synonyma both for the tree and the Gum.

Boswellia Serrata *.
Sansc. Sallací or Sillací, Cundurucí † or Cundurí, Surabhí ‡, Suvahá, &c.
Hind. Sálaï, Sálé, Sálá or Silá, Sajíwan.
Gr. Libanos.
Lat. Libanus.
The Gum. *Sansc.* Cunduru, Cunda, Mucunda, &c. *Ar.* & *Pers.* Cundur (anciently Lubán.) *Syr.* Labuniya. *Heb.* Lebonah.
Gr. Libanotos or Libanos. *Lat.* Libanus. Mod. *Lat.* Olibanum, (quasi Oleum libani).

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* If the genus had not already received a botanical name, it might have been suitably denominated from the resinous Gum, afforded by this tree; and the generick and trivial names of the species might be Libanus thurifera.

† Producing Conduru.

‡ Fragrant.

VIII.

REMARKS *on the* SPECIES *of* PEPPER, *which are found on* PRINCE OF WALES'S ISLAND.

BY WILLIAM HUNTER, ESQ. M. D.

HAVING had an opportunity, during a residence of some months at *Prince of Wales's Island*, to ascertain, partly by observation and partly by inquiry, some particulars which I conceive to be new respecting the culture and preparation of black pepper, the principal staple of that island, I am induced to lay the fruit of my researches before the Asiatick Society. To these I have added a few remarks on the other species which are found on the Island. I judged it would not be without utility to add the oriental names of each species; and in this part of my task, as far as regards the Sanscrit and its derivative, I am indebted to the liberal assistance of Mr. COLEBROOKE.

1. *Piper nigrum.* Lin. sp. 40. Syst. 74. Reich. 1. 75. Willden. 159. Fl. Zeylan. 26. Mat. Med. p. 41. Woodv. Med. Bot. 513. t. 187. Camelli de plantis Philip. in Phil. Trans. vol. 24. p. 1773. Loureir: Cochinch. 30. Miller illust. Plenck icon. Miller's Dict. No. 1.

Black Pepper. Leaves ovate, accuminate, five to seven nerved, smooth; petioles short.

Piper rotundum nigrum. Pluk: almag. p. 297. t. 437. f. 1.

Piper rotundifolium nigrum. Bauhin. pin. 411. Morison hist. pl. 3. p. 602. f. 15. t. 1. f. 1. Blackwell t. 848. Ray. Hist. 1341. Burm. Zeyl. 193.

Lada, aliis *molanga* s. *Piper mas.* Piso Mant. Arom. p. 180. cum icon.

Molago Codi. Hort. Malab. v. 7. p. 23. t. 12.

Pepper-plant. Marsden Sumat. p. 105, & seq.

Gr. Πεπερι

Sans. *Maricha, Marícha.*

Hind. *Mirch, Golmirch, Cálímirch.*

Arab. *Fulfúl, Filfil.*

Pers. *Pilpil.*

Malay. *Ladda.*

THE Greek name of this species, from which the name of the genus is taken, has been said to be derived from Πεπω, because it is supposed to promote digestion [1]. But we have it on the authority of HIPPOCRATES that the Greeks received this term from the Persians [2]; and these undoubtedly, had it from the Indians [3], from whose country they imported the drug itself. In fact, the Persian and Arabick, as well as the Greek and Latin names, are derived from *Pippali*, the Sanscrit denomination of Long Pepper. The ancients in general, with the single exception of THEOPHRASTUS, supposed the black, the white, and the long pepper to be the produce of one plant. Hence, they might naturally enough apply to one species the Indian name of another. SALMASIUS, who notices this [4], has fallen, in common with other modern writers [5], into the opposite error, by supposing the black and white peppers to grow on different plants. PISO appears to be the first

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1 Scapulæ Lexic. in voce. Alex. Aphr. in præf. l. 1. probl.

2 De Morb. Mulier: ed. Fœs. p. 672. l. 14.

3 Salmas. Plinian. Exercit. in Solin. (Paris 1629. fol.) p. 1026. C.

4 Ibid.

5 Garcias Hist. Arom. apud. Clus. exot. p. 182.

who corrected this mistake [6]; and his statement is confirmed by RHEEDE [7], LOUREIRO [8], and MARSDEN [9].

THIS plant has been so fully described, that I have nothing to add on that head. But as it is the most important article of produce on *Prince of Wales's Island*, the manner of cultivation pursued there merits a particular detail.

IT is propagated by cuttings, or suckers. They are generally planted at the distance of about $7\frac{1}{2}$ feet; that is 100 plants in an *U'rlong*, which is a measure of 80 yards square, nearly equal to 1 1-3 Acre. But some experienced cultivators think that the distance should be greater; perhaps nine feet; as the roots would be better nourished, and the produce more abundant.

WHEN a plantation is to be commenced, the large timber is cut down by Malays, at the rate of five Dollars per *U'rlong*. The remaining labour is performed by Chinese, who dig out the roots, burn them and the trunks, pulverise and level the soil, plant the pepper vines and the trees which are to support them. It is usual to contract with them for making the plantation in this manner, and taking care of it for three years, at the end of which time it is in bearing, at the rate of 225 Dollars for 100 plants. The sum is liquidated by instalments, as the contractor requires it to pay his workmen. Something more than one-third is paid

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6 Mantissa Aromatica.
7 H. M. v. 7. p. 23.
8 Fl. Coch. 30.
9 Hist. Sum. 106, 117.

in the first year, because the labour is then greatest; but about one-fourth of the whole is generally reserved, till the contract is completed, and the plantation delivered over. This does not include the price of the plants, or cuttings, which are furnished by the proprietor of the plantation.

THE vine is first made to climb on a pole. At the end of ten or twelve months, it is detached from the pole, to undergo the process called laying down. A circular hole, about eighteen inches in diameter, is dug at one side of the plant. At the bottom of this the plant is carried round in a circle, and the end of it is brought to the tree which is in future to form its support. The depth of the hole, in which the vines are laid down, varies, according to the situation and nature of the soil; and much judgement, to be acquired by practice, is requisite, to adapt it to these circumstances. In high and dry situations, the depth must be considerably greater than in those which are low and moist. Too little depth in the former would expose the roots to be parched in dry seasons; and too much in the latter would occasion them to rot, from excess of moisture.

THE trees used for supporting the pepper vines on *Prince of Wales's Island* are the *Morinda Citrifolia (Mankúdo)* and the *Erythrina Corallo dendron (Dadap)*. The Chinese planters alledge, that the pepper supported by the *Erythrina* thrives better, and lasts longer than that supported by the *Morinda*. One instance I heard quoted in proof of this assertion, was a plantation which had been long neglected, and overgrown with weeds. When it came to be examined, the vines which had grown on the *Morinda* were all dead; while those on the *Erythrina* were still strong and productive. The reason assigned by the planters,

for this difference, is, that the roots of the *Erythrina* do not spread so much, or penetrate so deep, as those of the *Morinda*; whence they interfere less with the pepper, and do not draw so much nourishment from the earth.

THE *Morinda* was formerly made to grow with one stem, but this was not found to afford sufficient spread for the vines. Therefore, when that tree is used, the practice now is to break off the principal stem, at the height of about two feet from the ground. This obliges the trees to put out lateral branches at that height. When these have attained the length of about a foot or fifteen inches, they are cut off. From their ends arise erect shoots, each of which forms a stem, so that the vine has four or five stems to climb on, instead of one.

THE vines, at three years of age, begin to produce, and they are reckoned to be in full bearing at five or six. They continue nearly in the same state for eight years more, or till they are fourteen years old. From that period they are reckoned on the decline; but the planters on *Prince of Wales's Island* cannot yet judge from experience, at what rate, or in how long a time they decay. Some Chinese, who have cultivated the plant on the *Malay* coast, say the vines have not arrived at their point of greatest produce till they are fourteen years old; and that from this, gradually declining, they continue bearing till near thirty.

THE first year of bearing, or at three years old, the vines do not yield more than half a *cattí* each. But plants kept in good order, when in their prime, will produce three *cattís* [10]. A plantation of 3000

[10] A *catti* is 1⅓ lb.

vines at *Súngí Clúan* [11], now in its eleventh year, has been let for three years at seventy *picols* yearly, or at the rate of $2\frac{1}{3}$ *cattís* each plant. It must therefore produce as much more as will pay the tenant for his labour and risk. They are generally let, for the first five years of bearing, or from three to eight years old, at 160 *picols* per *laksha* (10,000) or at 160 *cattís* for 100 vines.

The vines yield two crops yearly. The first gathering commences at December, after the heavy rains are over; and at the same time, the vines have put out new flowers. This first collection may be finished in February. The flowers which spread in December have ripened their seeds in April or May. The second collection then begins, and ends in July. During this time, blossoms have expanded, which are to furnish the crop of next December. But, with the most careful cultivators, who gather only the bunches which are fully ripe, these two harvests run so nearly into one another, that the collection is in a manner continued without interruption, from December till August; so that there is only an interval of four months in the year, which is the season of the heavy rains.

The bunches are plucked off entire, taking care to pull only those that are ripe. They are thrown into baskets, and allowed to remain for a day. They are afterwards spread on mats, and trodden with the feet, to separate the fruit from the stalk. The grain is next winnowed, to clear it from the stalks and the lighter grains; and the good heavy grains are spread on mats, in the sun, to dry, for three days. It is calculated that one hundred *cattís* of green pepper, with the stalks, yield thirty-five *cattís* of clean and dry pepper. The collection of one day from

[11] A district near the southern extremity of the island, of which the soil is found peculiarly favourable to the cultivation of pepper. The oldest vines are in this district.

46,000 plants of three years old, was 500 *cattis* of green, or 175 of dry pepper.

It is usual, as was before noticed, when the plantation is delivered over to the proprietor, at the end of three years, to let it to a Chinese farmer, for five years more; as the proprietor is hereby less liable to imposition, the only precaution necessary being to see that the tenant is careful of the vines during the last year, and leaves them in good condition at the expiration of the lease. This is the only way in which a very extensive plantation, or one whereon the proprietor cannot bestow his whole attention, can be managed to advantage. But, if the proprietor has time, and is careful and acute, he may render it something more productive, by keeping it in his own hands. The labour of cleaning the vines, throwing up earth about the roots, and collecting the produce of the plantation abovementioned, of 46,000 plants, was performed by sixteen Chinese workmen.

The Table at the end of this paper exhibits a calculation of the profits that may be expected in twelve years from a given space of ground planted with pepper; supposing it to sell at ten dollars a *picol*; which was the price on the field when I was on the Island [12], and then esteemed very moderate. But I understand it has lately fallen to something between eight and nine Dollars.

The whole quantity of pepper produced in that year on the Island, was estimsted at something between sixteen and twenty thousand *picols*. Taking the medium quantity at 12 Dollars, which was the selling price, this article must have amounted to 216,000 Dollars.

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[12] In 1802.

The island pepper is more esteemed than that which comes from the *Malay* continent and *Sumatra*, and it sells for about one Dollar more per *picol*. The difference is occasioned by the haste of the *Malays* to gather the fruit before it is sufficiently ripe.

2. *Piper Betle*. Lin. sp. 40. Syst. 74. Reich. 1. 75. Willd. 159. Fl. Zeyl. n. 27. Loureir. Cochinch. 31. Burman. Zeyl. 193. t. 83. f. 2. Moris. Hist. 3. 603. Miller's Dict. No. 2. Leaves obliquely cordate, acuminate, waving, seven-nerved, smooth.

Betele Tambul sive *Betre*. Burm. Zeyl. 46.

Betre, Betelle, Betele, Betle. Bauh. Hist. i. p. 437. Ray. Hist. 1913. Acost. Arom. c. 10. Clus, exot. 176. t. 176. Dale pharm : 313.

Beetla Codi. Rheede Mal. 7. p. 29. t. 15. Bulat wæla. Herm. Zeyl. 34. 36. 66.

Sans. *Tambulí, Parńalatá, Nágavallí*.

Hind. *Támbul, Tamból, Nágbél, Pán*.

Tamul. *Vetillay-Chuddi*.

Malay. *Síri*.

SAUMAISE has shown at length, and with considerable strength of argument, that the ancient Greek writers meant this leaf by *Malabathrum*, rather than the leaves of *Laurus Cassia*, or *Tez-pat* [13]. The Arabick and Persian Languages have no names for this plant. *Tambol* is borrowed from the Hindí by Persian Authors, who name the leaf *Bergitambol*. It is called *Pán* in Hindí, from the Sanscrit *Parna*, a leaf in general ; in the same manner as it was known to the Romans under the name of *folium* [14]. The Indian writers enumerate

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13 Salmas. Exer: Plin. p. 1070.
14 Id. ib. p. 1071, 1072.

several varieties of this plant, distinguished by the size, shape, and flavour of the leaf[15].

THE *Malays* reckon five varieties, among which are these three, *Siri Malayo*, *Siri China*, *Siri U'dang*. The specimen of which the leaf is above described was the *Siri China*. The *Siri U'dang* they say has the petioles and nerves red.

CULTIVATED, but in no great quantity. A larger quantity is imported from the neighbouring coast.

3. *Piper Siriboa*. Lin. sp. 41. Reich. 1. 76. Willd. 161. Flor. Zeyl. 29. Swartz. obs. 19. Miller Dict. No. 10.

Siriboa Rumph. Amb. 5. 340. t. 117.

Betela quem Sirii boa vocant. Bont. Jav. 91. t. 91. Ray. Hist. 1913.

Malay *Baci*.

THE fruit is nearly as long as a finger, and tastes like the Betel leaf; and hence the name; *boa* signifying *fruit* in the *Malay* language. It is used as a substitute for Betel, especially at sea, where the fresh leaves cannot be procured.

3. *Piper Chaba*. H. Leaves alternate, petioled, lance-ovate, oblique at the base, with veins opposite: Spikes leaf-opposed, peduncled, somewhat conical, compact.

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[15] The Mekhzen úl Adviyeh, a treatise on Materia Medica, composed by MUHAMMED HUSAIN, brother to the NAWAB MUHUMMED REZA KHAN, enumerates the following five kinds, *Maghi*, *Cángíri*, *Cáfúri*, *Sánchí*, *Benglá*. He thus describes the method of treating the leaves, by which they are made tender and acquire a whitish colour.—A quantity of the leaves newly gathered is put into a bag, an earthen pot, or a basket, covered with straw, and placed in a hole dug in the ground.—The straw is set on fire, and allowed to burn till the leaves are heated to a certain degree. The fire is then taken away, and the basket left for twenty-four hours in the hole, with a weight laid on it, to press the leaves gently together. It is afterwards exposed to the dews at night in the summer, or in winter kept in a warm place, till the leaves become white and tender.

Piper Longum Tsjabe. Rumph. Amb. 5. p. 333. t. 116. f. 1.

Malay. *Chábatádi.*

THIS species has been generally confounded with *Piper Longum*; but a comparison of the figure above quoted from RUMPHIUS, with that of RHEEDE's *Cattutirpali.* H. M. 7. p. 27. t. 14. will clearly evince them to be different.

THE *Piper Longum* is called in Sanscrit *Pippali*, in Hindi *Pipel*, and in Persian *Pilpili deráz.* The species now under consideration appears to be the same that is called in Sanscrit *Chavicá* and in Hindi *Chab.* All the Sanscrit medical writers, as well as vocabularies of that language, concur in stating the produce of this plant to be *Gaja pippali* or *Gaj pipel.* This name was however assigned to a very different plant examined by SIR WILLIAM JONES [16], the *Tetranthera Apetala* of DR. ROXBURGH [17]. And the fruit of a plant, very different from both, is sold under that name by the native druggists in Calcutta.

5. *Piper Latifolium?*

FRUIT like the former. Leaves alternate, deeply cordate, obtuse, nine-nerved.

Mal. *Gádú* or *Gádúkh.*

THE leaves are used as a pot-herb.

HAVING seen only a small specimen, without fructification, which I know merely by description, I cannot speak with certainty of this species.

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16 Asiat. Res. v. 4, p. 303.
17 Pl. Corom. No. 147.

Table exhibiting an Estimate of the expence and produce, in 12 years, of 100 Urlongs, planted with Pepper.

		Dr.		Cr.		Balance.	
		Sp.Drs	P	Sp.Drs	P	Sp. Drs.	P.
1st Year, Clearing of heavy Timber by Malays, at 5 Drs. per *Urlong*, -	500						
To the Chinese Contractor, in the course of 3 years, when he engages to deliver the plantation in full bearing, at 225 Drs. per 1000 plants, -	22,500						
Of this in the first year, -	8437 50	8437	50	—	—	8937	50 Dr
2d Year, Farther payment to contractor, - - -	4218 75	4218	75	—	—	—	—
Interest of 1st year, at 12 per cent, - - - - - - - -		1072	50	—	—	14,228	75 Dr
3d Year, In full to contractor,	9843 75	9843	75	—	—	—	—
	22,500						
Interest in the 3d year, - - -		1707	15	—	—	25,779	95 Dr
4th Year, Interest, - - - - -		3093	59	—	—	—	—
Supposing the plantation to be let, during the first 5 years of bearing, at 160 *picols* per *Lacsha*, this will be 1600 *picols*; which may be sold, on the ground, at 10 Drs.				16,000	—	12,873	54 Dr
5th Year, Interest, - - - - -		1544	82	—	—	—	—
5th year's crop, - - - - -				16,000	—	1581	64 Cr.
6th Year, Interest, - - - - - - -		—		189	80	—	—
6th year's crop, - - - - - - -		—		16,000	—	17,771	44 Cr
7th Year, Interest, - - - - -		—	—	2132	57	—	—
7th year's crop, - - - - - - -		—	—	16,000	—	35,904	01 Cr
8th Year, Interest, - - - - -		—	—	4308	48	—	—
8th year's crop, - - - - -		—	—	16,000	—	56,212	49 Cr
9th Year, Interest,		—	—	6745	50	—	—
The plants being now in full vigour, may be let for four years more at 2 *cattis* each plant, or 2000 *picols*; which is - - - - - - - -		—	—	20,000	—	82,957	99 Cr
10th Year, Interest, - - - - - -		—	—	9954	96	—	—
10th year's crop, - - - -		—	—	20,000	—	112,912	95 Cr
11th Year, Interest, - - - - -		—	—	13,549	55	—	—
11th year's crop,		—	—	20,000	—	146,462	50 Cr
12th Year, Interest, - - - - -		—	—	17,575	50	—	—
12th year's crop, - - - - -		—	—	20,000	—	184,038	— Cr

IX.

Description *of an improved* Hygrometer.

BY LIEUTENANT HENRY KATER,

Of His Majesty's 12th Regiment.

Since I had the honor of laying before the Asiatick Society "a description of a very sensible Hygrometer," I have attended much to the improvement of the instrument, and am induced to think that some further account of it may not be deemed wholly unacceptable.

The principal objection to the Hygrometer described in my former paper, arose from the necessity of shortening the beard of the *oobeena hooloo* *, in order to reduce the scale, to a convenient length; this was to be obviated, only by giving the instrument a circular form, and inventing some mode of ascertaining without difficulty the number of revolutions made by the index.

ABCD (fig. 1) is a frame, made of small square bars of brass or silver; this plate is soldered to a square plate BE, the edges of which are turned up, as represented by the dotted lines, to secure the *index* from injury: on the face of the plate is engraved a circle (see fig. 4) which is divided into *one hundred* equal parts. Three holes, a, b, c, are made through the frame and plate in the same direction; the holes a & b, are of a conical form as represented by the dotted lines, and are highly polished to lessen friction; the hole at c receives a screw, one end of which is tapered, and has a *notch* cut in it with a fine saw, which may be closed by means of the sliding ring d.

The *axis* e f, is made of silver wire, very smooth and straight, and of the size of a large knitting needle; on the axis, *a screw* is formed, by twisting a smaller silver

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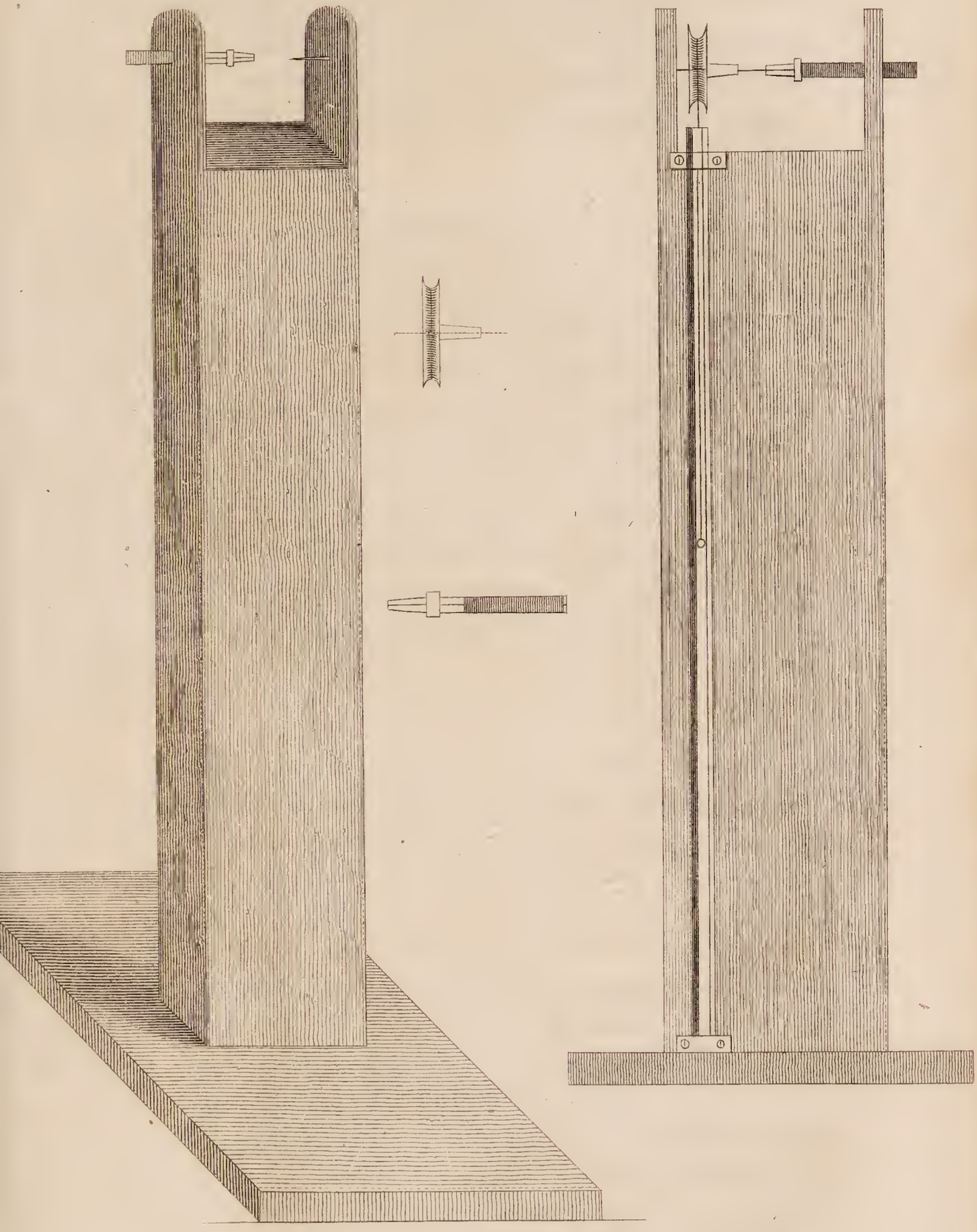
* *Andropogon Contortus.*



wire tightly around it *from left to right:* this screw should be fourteen or fifteen threads in length; the end of the axis, f, is divided, and is to be closed by a small sliding ring. As this is the most important part of the Hygrometer, fig. 2 represents it on an enlarged scale.

A *loop* and *drop* (fig. 3) is made of fine gold wire, of such a size as that when suspended on the screw, it may slide along it with perfect freedom by means of the revolution of the axis, but not escape from one interval to another by any other motion: should the loop, on trial, be found too large (as indeed it ought to be) it may be easily closed a little, by placing it on the screw, and pulling it gently by the drop; it will then assume an elliptical form, as in the figure. This loop is intended to register the number of revolutions made by the index, as it hangs freely from the *axis*, and advances one *interval* between the threads of the screw, for each revolution.

The *Index*, g h, is made of fine wire, accurately balanced, and as light as possible; it fits on the end of the axis e, *and is to be placed at right angles with the commencement of the screw.* (See fig. 2.)

The beard of the *oobeena hooloo* is represented at f d, (fig. 1.) The top of it, which is crooked, being cut off, it is first secured between the cheeks of the axis, at f, by means of the small sliding ring; the axis is then turned round till the gold loop is brought to the fifth or sixth *interval* of the *screw*, counting from the dial plate; the screw at c is then advanced, so as to receive the lower or thick extremity of the beard of the *oobeena hooloo* in the notch, where it is also confined by the sliding ring d.

The extremes of *dryness* and *moisture* are determined in the following manner. The Hygrometer is placed in a new earthen pot, which has never been wetted, and exposed for a considerable time to as great a heat as the grass can bear without injury: when the *index* is perfectly steady, the Hygrometer is to be taken out of the vessel, and the screw at c, turned round with a pair of pincers, so as to bring the gold loop to the *first interval* of the screw on the axis, counting as before from the dial plate, (which is to be placed to the left hand) and the index to 100 or zero. The Hygrometer must now be suffered to cool gradually, during which, if the atmosphere be in a mean state of moisture, the index will make four or five revolutions; the *oobeena hooloo* is then to be continually wetted with a hair pencil and water, till the index is again perfectly steady. This will require some time, as it moves very slowly when within a few degrees of *extreme moisture*. The degree at which the index stands is now to be noted, and the number of *intervals* counted between the dial plate and gold loop, and this number prefixed to the observed degrees will give the extent of the scale.

All observations made with this Hygrometer, are to be reduced to what they would have been had the scale consisted of 1000 parts, or ten revolutions of the index. This is most convenient, as it facilitates the comparison of observations made with different Hygrometers. An example may not be thought superfluous. Suppose the scale of the Hygrometer to be 1145, or eleven *intervals* and forty-five *parts*; and that at the time of observation, there are *four intervals*, between the dial plate and gold loop, and 50 *parts* shown by the *index*; this would be written 450. Then, as 1145 : 1000 : : 450 : 393 nearly, the number of degrees to be registered.

If two of these Hygrometers, in which the extremes of dryness and moisture are well determined, be compared together, they will seldom differ *ten divisions* from each other, which is as near a coincidence as can be expected.

The *oobeena hooloo* or *Andropogon Contortus* is found in every part of the country, in the month of January, when it should be gathered, and thoroughly dried in the sun, before it is used.

This grass appears to be far superior to any other hygroscopic substance, hitherto discovered. In the Encyclopædia Britannica, the scale of Saussure's Hygrometer is said to consist of 400 degrees, or rather more than *one* revolution of the index; the Hygrometer here described makes *eleven* or *twelve* revolutions; it possesses also the advantage of being perfectly portable, cannot easily be deranged, and may be much reduced in size, if thought necessary, without affecting the extent of the scale.

X.

On Ancient Monuments, *containing* Sanscrit Inscriptions.

BY H. T. COLEBROOKE, ESQ.

In the scarcity of authentic materials for the ancient, and even for the modern, history of the *Hindu* race, importance is justly attached to all genuine monuments, and especially inscriptions on stone and metal, which are occasionally discovered through various accidents. If these be carefully preserved and diligently examined; and the facts, ascertained from them, be judiciously employed towards elucidating the scattered information, which can be yet collected from the remains of Indian literature, a satisfactory progress may be finally made in investigating the history of the *Hindus*. That the dynasties of princes, who have reigned paramount in *India*, or the line of chieftains, who have ruled over particular tracts, will be verified; or that the events of war or the effects of policy, during a series of ages, will be developed; is an expectation, which I neither entertain, nor wish to excite. But the state of manners, and the prevalence of particular doctrines, at different periods, may be deduced from a diligent perusal of the writings of authors, whose age is ascertained: and the contrast of different results, for various and distant periods, may furnish a distinct outline of the progress of opinions. A brief history of the nation itself, rather than of its government, will be thus sketched: but if unable to revive the memory of great political events, we may at least be content to know what has been the state of arts, of sciences, of manners, in remote ages, among this very ancient and early civilized people; and to learn

what has been the succession of doctrines, religious and philosophical, which have prevailed in a nation ingenious yet prone to superstition.

UNFORTUNATELY, writers have seldom given the dates of their compositions: and the *Hindu's* love of fable, and distaste for sober narrative, have been as unfriendly to the biography of authors, as to the history of princes. The lives of few celebrated persons have been written, and those, which have been composed, exhibit the same fondness for improbable fiction, which pervades the mythological works of the *Hindus*. The age of an author must be therefore sought from circumstances mentioned in his writings: and none more frequently affords the desired information, than the author's notice of his patron; who generally is either the sovereign of the country, or some person standing in such relation to the court, as gives occasion to mention the name of the reigning prince. Thus every ancient monument, which fixes the date of a reign, or determines the period of a particular dynasty, tends to the ascertainment of the age of writers who flourished in that reign or under that dynasty: and, conversely, wherever dates can be with confidence deduced immediately from an author's works, these may furnish historical information and assist the explanation of ancient monuments.

ON this account the preservation and study of old inscriptions may be earnestly recommended. It is not on a first or cursory examination, that the utility of any particular monument for the illustration of the civil or literary history of the country can be certainly determined. Even those, which at first sight appear uninteresting, may be afterwards found to bear strongly on an important point. Instances might be brought from the few inscriptions, which have been already published.

But it is not my present purpose to enter on an examination of published monuments, but to urge the communication of every inscription which may be hereafter discovered; at the same time, that I lay before the Society copies and translations of those which have been recently communicated from various parts of *India*.

It is a subject for regret, that the originals, of which versions have before been made publick, are not deposited where they might be accessible to persons engaged in researches into Indian literature and antiquities: but much more so, that ancient monuments, which there is reason to consider as important, have been removed to Europe, before they had been sufficiently examined, or before they were accurately copied and translated. I may specify, with particular regret, the plate of copper found at *Benares*, and noticed by Capt. Wilford in the present volume of Asiatick Researches (p. 108.); and still more a plate which has been mentioned to me by a learned *Pandit*, (who assured me that he was employed in decyphering it) *, and which appears, from a copy in his possession, to have contained a grant of land by the celebrated Jayachandra, when a young prince associated to the empire of his father: from this information it seems to have been particularly valuable on account of the genealogy comprised in it.

Translations might indeed be made from the *Pandit's* copy of the last mentioned plate, and from one taken by a learned native in Capt. Wilford's service, from the plate discovered at *Benares*. But my experience of the necessity of collating the copies made by the best *Pandits*,

* Servóru Trivedí; the same who assisted me in decyphering the copy of an inscription on Firóz Shah's pillar at *Delhi*. As. Res. vol. 7. p. 180.

from inscriptions in ancient or unusual character, discourages me from placing implicit confidence in their transcripts: and the originals are at present beyond reach of reference, having been conveyed to Europe to be there buried in some publick museum or private collection.

THE only amends, which could be now made for the removal of those interesting monuments, would be the publication of copies correctly made in fac simile. From such transcripts, provided they be executed with great care, the text may be decyphered and translated. An exact copy of the *Sanscrit* inscription on the stone at *Cintra* in *Portugal*, enabled Mr. WILKINS to ascertain the date and scope of that inscription; as well as the names, which it contains *. Similar copies of other inscriptions would in like manner furnish oriental scholars with the means of ascertaining their purport; and the publication of fac similes may, for this purpose, be recommended to those who are in possession of the originals.

I NOW proceed to describe, and, so far as I have succeeded in decyphering them, to explain, the several inscriptions on ancient monuments in stone and copper, which have been lately presented to the Asiatick Society.

I. *Inscriptions on a Plate of Copper found in the district of* TIPURA.

TOWARDS the end of 1803, a plate of copper was discovered in digging earth for the repair of the high-

* MURPHY's Travels in *Portugal*, p. 277.

way through the *Manamati* hills in the district of *Tipura*. It was carried to Mr. ELIOT, Magistrate of the district; and by him communicated to the Asiatick Society. On examination, it has been found to contain an inscription declaratory of a grant of land, dated near 600 years ago.

THE plate measures 11 inches in height and 9 in breadth; and is engraved on one surface only. The sides have a gentle curvature; and, at top, is an abrupt bend allowing room to a figure coarsely delineated and apparently intended to represent a temple. The character agrees nearly with that now in use in *Bengal:* but some of the letters bear a closer resemblance to the writing of *Tirhut* *.

THE following is an exact copy of the inscription in *Nágari* letters, as decyphered by the aid of several *Pandits*. A literal translation is subjoined; and a fac simile of the original is exhibited in the annexed engraving.

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* There is reason to suppose the writing, as well as the language of *Bengal* to be originally the same with the *Tirhútíya:* altered, in course of time, since the separation which has been the consequence of a colony of *Cányacubya Brahmens* settling in *Bengal*.

श्री ॥ तस्मिन्नुच्चैर्मालनकुलेविश्वविख्यातकीर्त्तिर्विद्याधारः परमसुहृन्नीमण्डनपण्डितानां ॥ ख्या
तः श्रीमान्जनिसमहानन्दडिण्डवाभिधानो यस्य स्वच्छे व्यवहरदनिशंमानसेधर्महंसः ॥ १ ॥ तस्माद
भूदमलकीर्त्तिकलाविनानः श्रीमानमान्यनितकोमनुजामरेन्द्रः ॥ हृष्ट्वा यशीतमिति यस्य टिकृद्धिपाठ्या
द्विन्न्वारुजो स्वयशमानिवसंविभाति ॥ २ ॥ अविरहात्मसहाम्बुनिवन्धिकः परमतत्त्वमहत्त्वमधिष्ठितः ॥
रुचिरतोनिपुणीनिश्रगोष्ठतिः स्वजधर्मसुकर्मठशोभते ॥ ३ ॥ दानध्यानमहोदधिः प्रविचलच्चित्तैकका
शगृहनत्वात्वादनृवामयः कतिद्यथारःपरपाणिना ॥ धर्मस्यातुलकीर्त्तिस दृष्टकृतोगुणैकयोगीश्वरः सोय
श्रीधडिण्डवणकत्तुदभ्दानन्द चन्द्रोभवि ॥ ४ ॥ यस्मिवाम्बुनिवन्धिकोशयमस्वतस्त्राणीन्द्र चूडामणिमम
श्रीरणबडूमहत्वम्पनिलीलातिलोकान्तरं ॥ शाक्यमद्रिरितस्तसिजगतोपनच्छ्रणेःमिःसितैःप्रासादेऽपि

TRANSLATION.

1. In that * eminent and spotless family, was born, an ornament of the learned, renowned throughout the world, endowed with science, and practising good deeds, the celebrated, happy, and venerable He'd'i †; in whose pure mind, virtue ever ranges, like a swan in the limpid lake.

2. From him sprung the happy chief of ministers, who exhibits the joys of unsullied glory; a spotless moon, among mortals, and at sight of whom the hare-spotted luminary ‡ appears swoln [with envy,] and distempered with alternate increase and wane.

3. That venerable officer §, ever relying on holy virtues ||, is eminently conversant with well guided morals, and conspicuous for the observance of practical duties.

4. Himself an ocean of generosity and meditation,

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* This use of the pronoun indicates the conspicuousness of the object; as if sufficiently known without further designation.

† Here, as well as with the subsequent names, the particle *eva* is subjoined without changing the preceding vowel. This is contrary to the rules of the language, and emendations have been accordingly proposed: but I shall not disturb the text.

‡ The moon is named *Sasan*, from a fancied resemblance of its spots to a leveret. *Pandits*, to whom I showed maps of the moon, copied from Hevelius and Ricciolus, fixed upon the *Lacus Paludosa* and *Mons Porphyrites*, or Keplerus and Aristarchus, for the spots, which, they think, exhibit the similitude of a hare.

§ The term is *Aswanibandh'ica*, which the *Pandits* are disposed to explain as signifying "a general commanding cavalry." Other interpretations may be suggested: the word is an unusual one.

|| This, as indeed the whole of the verse, is obscure, and admits of various interpretations. In this place, more than one reading has been proposed.

yet thirsting to taste, by practice of austerity, that which alone confines the fleeting thoughts * ; sympathising with other living beings, an unrivalled theatre of virtue, practising good deeds, and, in private, only a contemplative saint, this auspicious D'HAD'I alone rose, as a luminary of joy above the earth.

5. SUPERIOR to the world was the delight of this pre-eminent sovereign of the earth, the happy RANABANCA MALLA, whose officer † he was ; for the deity, who has a hundred eyes ‡, is obscured, even in his own abode, by the dazzling glories of that [monarch], which traverse the three worlds, in all directions.

6. 'MAY the twenty *drónas* § of land, in the village of *Ijac'hand'a*, granted to him by that generous prince, continue as long as sun and moon endure, yielding the ample harvest of unsullied praise ; for it is land secure from invasion, delightful, like a pleasant painting, and appears like a crest in the assemblage of cities.

7. 'THIS land, with definite boundaries has been given by the liberal prince himself, the range of whose glory therefore extends, as is fit, in all directions.

8. 'O FUTURE kings ; understand this inscription on copper, by which that officer || humbly now solicits

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* Here again the sense is obscure; and more than one reading may be proposed. The praise is evidently grounded on the union of practical virtues, with religious contemplation.

† *Aswaniband'hica.*

‡ INDRA.

§ A measure of land, still used in the eastern parts of *Bengal*; originally as much as might be sown with one *Drona* of seed : for a *Drona* is a measure of capacity. (As. Res. vol. 5. p. 96.) The *Drona*, vulgarly called *Dún*, varies in different districts. It may, however, be reckoned nearly equivalent to eight *Bighas*, or two acres and two thirds.

|| *Aswaxiband'hica.*

you: this land should be preserved; nor is the permanence of the realm consistent with the slightest injury: a shame on avarice! That land is, as it were, a widow, the sovereign of which is despised [for his covetousness.]

9. 'ALTHOUGH this excellence of the descendants [of that prince,] which is guarded by their natural virtues, be sufficiently apparent, yet does ME'DINÍ, urged by the multitude of the good qualities of that unsullied race, thus make it known *.

'YEARS expired of the *S'aca* king 1141 †; dated in the seventeenth year of RANABANCA MALLA, SRÍMAT HARTICA'LA DE'VA ‡, or expressed in numerals, *Samvat* §, 17; on the 29th of the Sun's being in the balance.'

II. *Inscription on a Plate of Copper found in the district of* GORAKHPUR.

A PLATE of copper, containing an inscription in the *Sanscrit* language, declaratory of a grant of land, but without date, was lately found in the district of *Gorakhpur*, near the river called the little *Gand'hac*. It was brought to Mr. JOHN AHMUTY, Magistrate of

* This inscription appears not to be a grant by the sovereign; but a memorial of the grant recorded by the possessor, who must have been the heir of the grantee, and who seems to acknowledge in this place the liberality of the grantor's successors continuing the land to him.

† Corresponding to A. D. 1219.

‡ This prince is probably a different person from the grantor named in the fifth verse.

§ Here *Samvat* is used for the year of the king's reign. See remarks, towards the close of this paper, on an inscription found at *Amgáchhi* in *Dinájpur*.

the district, and by him communicated to Captain WILFORD, who has presented it to the Asiatick Society.

THE plate, which is $16\frac{1}{2}$ inches long, and $12\frac{1}{2}$ broad, is engraved on one face only. The lines, of which there are 24, run in the length of the plate; and on the left side is a curvature, on which a semi-circular appendage is riveted, containing a flat button representing the impression of a seal. The figure is very imperfect, but seems to be intended for some animal.

WITH the plate itself, Captain WILFORD communicated a copy of its contents as decyphered by a *Pandit* in his service. On carefully comparing it with the original, I found all the essential passages, as well as the names, correctly given: a few alterations, which this comparison showed to be necessary, have been made with the concurrence of several *Pandits* from *Tirhut*, who assisted me in collating it. I preferred the aid of *Pandits* of that province, because the peculiarities of the characters, where they differ widely, as they do in many instances, from common *Déva nágarí*, make a nearer approach to the *Tirhútíya* letters than to any other now in use. The whole inscription is indeed remarkable for the uncommon form of the consonants, and the very unusual manner in which the vowels are marked. On this account, an exact copy of the original in fac simile will be subjoined; as well as a correct transcript in modern *Déva nágarí* letters. The following version is as literal as the difference of idiom permits.

TRANSLATION.

1. 'SALUTATION to the God, who is manifested in various forms, from earth to the performer of a sacri-

fice *, who is an universal soul, to be apprehended only by contemplation of saints; and who pervades all.

2. 'SALUTATION to the unborn God †, who makes the world's production, its continuance, and ultimate destruction; and the recollection of whom serves as a vessel of transport across the ocean of mundane ills.

3. 'SALUTATION be to the husband of LACSHMÍ; to him who reposes on SE'SHA as on a couch; to him who is VISHNU extracting the thorns of the three worlds; to him who appears in every shape ‡.

4. 'SALUTATION be to the blessed foot of PA'RVATÍ §, which destroyed the demon MAHISHA, by whom all had been overcome; and which gives felicity to the world.

5. 'SURROUNDED by groves of lofty canes ||, inaccessible through the range of edifices on the hill's summit encompassed by a deep ditch in which fountains spring, secure by impassable defence from
6. dread of foes, a royal abode there is named *Vijeya-pura* **, which is situated on the declivity of the

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* SIVA, manifested in eight material forms: viz. Earth, Water, Fire, Air, Ether, the Sun, the Moon, and the person who performs a sacrifice.

† BRAHMA the creator, himself not created, and therefore termed unborn.

‡ VISHNU, who reposes on the serpent *Ananta* or *Sesha*; and who has been incarnate in various shapes to relieve the world from oppressors.

§ BHAWANÍ or DURGA slew MAHISHASURA. The legend is well known.

|| Bamboos (Bambusa Arundinacea and other species).

** The place here described may be *Vijey-pur*, on the northern declivity of the *Vind'hya* hills, a few miles from the temple of *Vind'hyá-vásiní* near *Mirzápur* on the Ganges. It is the ancient residence of a family, which claims descent from the former sovereigns of *enares*; and is still the abode of the head of that family. But the terms of the text, *Uttaragiri catace*, rather seem to signify 'declivity of the northern mountain,' than 'northern declivity of the mountain;' and that interpretation points to the range of snowy mountains, instead of *Vind'hya* which is reckoned a tropical range.

northern mountain, where the pain of regret is unknown, and every gratification is found.

7. 'THERE reigned the fortunate D'HARMA'DITYA, like another *Bód'hisatwa*, a mighty and prosperous prince, whose glory spread over the four
8. seas. His son was JAYA'DITYA *, adorable like the moon, the fortune of the world, like the tree which bears every desired fruit, and satisfying thirst like a
9. deep lake: humble, though a king; though young, prudent and averse from amorous passion; though liberally bestowing all, yet ever receiving the best result of all.

10. 'HIS minister, learned, intelligent, and vanquisher of foes, the son of a mighty chieftain and counsellor CRĬTACÍRTI, was the fortunate
11. MADA'LI †, whose pleasing counsels obtained a ready hearing, and who was by nature eager for the reduction of enemies ‡.

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* The name of JAYADITYA, is known as the patron of certain authors, who flourished at *Cási*; and who are considered as ancient writers. He is mentioned in the title of the *Vámana Cásicá*, and even termed the author of that grammatical work. I shall not undertake to determine whether this be the same person.

† The names, being uncommon, are, in this instance, doubtful. *Srimadáli* is clearly given as the name of the minister: and either the whole of it may be his name; or it may be resolved into *Srimat Áli*, or into *Sri Madáli*. The latter is most agreeable to the prevailing practice of prefixing *Sri* to a proper name. In this inscription, the auspicious syllable is prefixed to the names of the two kings first mentioned; but is not added to the names of the writers of it, who are noticed towards the close. (v. 20 & 22.)

Critacirti may signify 'of established fame:' but, if taken as an epithet, it leaves no other term which can be assumed as the name of the minister's father.

‡ The text exhibits *Pracriti parábaddhaceesho*. Though a very unsatisfactory reading it is here preserved, and has been translated in the most probable sense, which I am able to suggest for it.

12. 'THE village of *Dummadumá* *, obtained by him from the royal favor, and rich in tillage, dwellings and cattle, has been assigned by him to DURGA' †.

13. 'THE opulence of the good, who put their trust in the great, is indeed beneficial to others: the clouds gather water from the sea, and shower
14. it down on the growing crop. Rare indeed are those liberal persons, who distinguish not between their own dependants and strangers: how many are the all-productive trees even in the celestial grove ‡?

15. 'Do not imagine, father, that, in the sinful age, a general equality prevails: the sovereign defends the earth, but a weak individual guards not
16. even his house §. Birth and death, success and misfortune, are perpetually passing: why not, therefore, protect another's glory like one's own?
17. He, who bestows fertile land furnished with the means of agriculture, mounts a celestial vehicle, and ascends to heaven, gladdening his progenitors.
18. But he, who foolishly resumes land allotted to gods or priests, assuredly causes his ancestors to fall to hell, even though they had previously attained heaven.

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* A village of this name is situated in the district of *Allahabad*, within twenty miles of *Bijeypur* on the Ganges. But the name is not uncommon; and may belong to some place nearer to the northern mountains.

† JAYADITYA's minister, MADALI, appears to have assigned this village for general charitable uses, by consecrating it to the goddess DURGA. Such at least seem to be the most consistent reading and interpretation of the text.

‡ INDRA's garden called *Nandana*; in which five celestial trees are placed, termed *Calpadruma*, *Párijáta*, &c. The *Calpadruma* yields, as its fruit, every thing which is desired.

§ The intention of this and the following lines is to deprecate the resumption of the grant.

19. 'SPRUNG from a very pure race, respectful towards gods, priests, spiritual parents and the
20. king, a generous founder of temples, who has dug many ponds; by the tenderness of his disposition an image of *Sugata* ‡, a treasure of virtues, with subdued organs, wise, and averse from unpleasing
21. discourse: such was the *Cáyast'ha Nágadatta*. *By* him was composed with great devoutness, this praise of the minister; in apt measure and pleasing verse, elegant * and apposite.

22. 'The last three verses were written by his younger brother VIDYA'DATTA; for he himself was fearful of proclaiming his own virtues.

23. RICH and fertile is the village, obtained through the king's favour as an endowment for subsistence; and still more productive is this other village for virtuous men †.'

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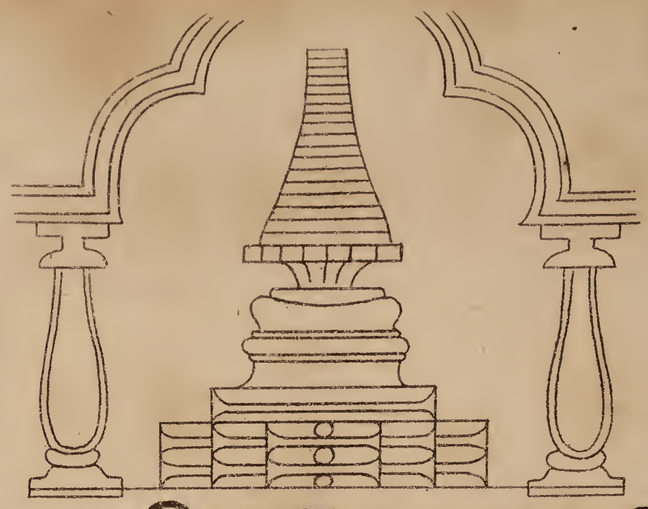
‡ From this comparison to *Sugata* or *Budd'ha*, as well as a previous comparison to a *Bodhisatwa*, it may be inferred, that the author, if not himself a follower of the sect of *Budd'ha*, was at least more amicably disposed towards that sect, than modern orthodox *Hindus* appear to be.

It is hardly necessary to inform the reader, that the last *Budd'ha* was conspicuous for his tender, compassionate disposition. The mythology of the sect of *Budd'ha* peoples heaven with *Bodhisatwas*: and, from this class of beings, the *Budd'has* are selected. GAUTAMA BUDD'HA was a *Bod'hisatwa* under the name of SWETACETU, before he was incarnate as SIDD'HART'HA son of SUDD'HÓDANA.

* The text exhibits *Surna critasóbhá*; which must be amended by reading either *Swarna* or *Suvarna*. The last is preferable as giving the most correct metre: either way the meaning is rendered 'elegant, as gold,' or by 'well selected words:' for *Suvarna* or *Swarna* or *Swarna* signifies gold; and may be resolved into words, *Su* well, and *varna* or *arna* a letter or syllable.

† The last line is very obscure. If it have been rightly decyphered and explained, it may allude to some other grant held by the *Rájá's* minister, for his own subsistence.



৭ ত স্মিন্ন ষ্টে বমনি নন্ত নে বি শ্ব বি খ্যা ত কী র্ত্তি র্বি দ্যা ধা বঃ ণ বম স্মৃ হ
ণী মণ্ড নম্য ণ্ডি গ না ম খ্যা তঃ শ্ব মা নস নি সম হ্মা নু দ্দে ও এ বা ভি ধা নো যম্ন
স্ম ভে ণ্ঠ ব দ নি স ম্মা ন মে ব ম্মী হ্ম সঃ ॥ ত স্মা দে হ্ম ন ন্ত কী র্ত্তি ক না বি ত ন ঃ
শ্রী মা ন মা ন ত্তি ন্ত কো ম গ্ন জ ম নে হ্ম ঃ ষ্ঠ ষ্কা ল্পা ত্ত মি তি য ক্ষ্ম ঠি তৃ ম্বি ল্পা থ্য
নৃ ঙ্গ ব ন্ত্রী শ্ব য থ্ম মা নি ব র্ম বি ভা জি ॥ স বি ব ঘ্ন ম ম হ্ম শ্ব নি ব শ্বি ক ঃ ণ ব ম
ত ল ম হ্ম ল ম বি ম্ভি ত ঃ ক ঠি ব ন্ধী জি ষ্ণু নী তি ঘ্ন গা ঘ্য ন্তি ঃ স হ্ম ন্থ ম্ম স্ব ঙ্ক ম্মী
শো ভ ন্তে ॥ জা ন থা ন ম ক্ষো দ্য বি ঃ ঞ্জ বি ঠ ন ষ্টি ক্তে ক্ক া ব হ্ম ন্ধ্রা স্মা দ ন্ত ঘা
ম য ঃ ক ত্তি য যা ব ঃ প ব ত্রা ণি নাং ধ র্ম্ম স্যা নু ন ক্তে মি ম্ন স্ম হ্ম ন্তা ও ত্তে ক্ত যো
গা শ্ব ব ঃ সো র্থ শ্চা ষ্ট ব ত্র ক ত্তে দ হ্ম া ন ন্দ ঠ ভ্রো ত্তু বি ॥ য স্মৌ ব্বা শ্ব নি ব নি
ক্রো ধ ম হ ন্ত ব ন্দো ণী ম্র হ্ম ত্তা ম ণে ন্তু ম্মী শ্ব ব ল ব ন্ধ ম নূ নূ প ত্তে ন নি ম্বি নো ক্ত
ও ব্বা শ্মা ক্রা ম ন্তি বি হ ন্তু ই ন্দ্রি ষ্ণ ন্তী ং য ত ন্ত য লো ত্তি ঃ নি ক্তৈ ঃ গ্রা মা ঘ্রে হ বি নি
ক্তে ম হ্ম স্ত ন ঘ নো ন্ন ন্ধ ন্ত ন্ত ন্ত নী না ন্নি ন্ত ঃ ॥ ঘ্র ন্ত্যো ন্তা বা বি ন্তা বা ক ঠি ব বি ব
ঠি ন্তা প ভু ঙ্ক্তে বা ন গ র্ঘ্যা ং যে ন য ধ ম্ম স্ম কা ম ং অ ক্ষ ট বি ব ঠ না গ্র ক্রি যে বা
ন্তি গ্রা মে ৎ স্মৌ বে ক্ষ ত্তু ন্নি ক্ষ স ব ন হ্মা যা বি ণ ন্তি ক্রো ণ ন্ত মি র্দ্দ ন্তা ঠ ক্ষ
র্ক মা স্মা ন ন্তি বি ম ন য ণ ঃ ণ ম্ব স ম্মা হ্ম ন্বি ঙ্ক ॥ ঘ ন্ত ন্তু ঘ স্মু ক্কী র্ত্তে
৩ স র্ব্ব হ্ম ত্ত ব ন্তি হ্ম ঃ ন ন্তা য ন্তি ণ ঠি ন্তে ন ঠ ন্তু ঃ সী ম্নে ন্তি হ্ম ঃ স্ব য ম্ম ॥ ভ
ক্রো বো ধ ন্ত ন্তা বি হ্ম নি ণ ন্ত ঘা ঘ ন্তা ন্ত্র প ন্ত্রা ন্ত্র ব ং ব্ব ন্ধা ন স্ব নি ব ন্নি
ক্রো ধ ম য়ী না দ ন্তা ন্ত্র নি ং যা ঠ ন্তে ধা ন্য া ঃ নি বি র্ম ন ন্না ক ন্তি ঘ য ন্ত্রো ণে
ন বা ন্ত ন্তি ন্তি দ্বি ন্থে ন্ম ং বি ধ ন্বে ব সা ব স্ব ম ন্তী ঘ ম্যা ন ন্ধী যা ন্ প্রা ন্তি ঃ
স হ্ম ন্ত ণ ম হ্নি ম্না ঘ ঘ্ন ণী ঘ ং ঘ ন্তা বা দ ন্তি বি ন স ন্তি ও ঘ্রা ব র্ণ ন্ত ন
ঘ্র ণা ন্তি র্বি ম ন ন্ত ন ন ও লৌ ঘৌ ন্তা ঠ মা হ্মা ন্থ মা ণ ঃ প্র ক ট য ন্তি ন্ত নি
মে দি নী প ব ন্ত ম ঃ ॥ ৪ ॥ এ ক নৃ প ন্তে ন্ত গী গ ন্ত ন্তা ঃ (১) ১) ° ব ণ্ণ ব
ম নৃ ন্ত্বী ম ণ্ড ছ বি কা ন ন্তে ব্বু পা ন্তা ন্ত না ন ন ঘু ন্ত ণ স স্ব ন্তে ব ই ন্তি নি

स्थवतीं । व्रजतिविमानारूढःपितृन्स आह्लादयन्नाक ॥ १७ ॥ अपहरतियोविमोहाद्देवद्विजाद
र्थितांवसुधां । स्वर्गस्थानपिनियतंपातयतिसपूर्वजान्नरके ॥ १८ ॥ अतिनिर्मलकुलजन्मादेवद्विज
गुरुनरपतिनतिसक्तः । खनितभूरिनवागःकारितदेवालयस्यागी ॥ १९ ॥ सुगतप्रतिमःरूपयागुण
निधिरमवज्जितेन्द्रियोविद्वान् । विधियवादेविपरःकायस्थानागदत्तइति ॥ २० ॥ सचिवस्यतेन चित्तालि
क्षणपुत्रास्तवर्णरूपशोभा ॥ बहुनालतिनपदाभिन्नयापरयाप्रपालिपिं ॥ २१ ॥ स्वगुणज्ञापनमीप्सि
सधात्राकनीयसाचितं । आर्याणांविनयप्रविद्यादत्तनभूनार्थेन ॥ २२ राजप्रसादलब्धधनकनक
समाकुलाऽतिसम्पन्नवती । जीवन पद्मिरितिसतांयामियंस्म नरःपरः ॥ २३ ॥

III. *Inscription on three Plates of Brass found at* CHITRADURG.

A GRANT of land, engraved on three plates of brass, which were found at *Chitradurg* in the year 1800, and a fac simile of a similar grant found at the same place, have been presented by Major C. MACKENZIE to the Asiatick Society.

THE plates, which appear to be very similar in both grants, may be described from that, of which the original has been received. They are nearly seven inches wide and as many high; but surmounted by an arch of two inches in height. The two exterior plates have been engraved on the inner side only: the middle one is so on both faces. At the edge is a rim, half a line thick, by which the inscription is secured from being effaced by the rubbing of the plates. They are held together by a brass ring, on which is a seal of the same metal representing a boar. The engraved surfaces have some appearance of having been once gilt.

THE language is *Sanscrit*, excepting the description of the lands, which is in the *Canara* dialect. The whole inscription is in *Déva-nágarí* characters: but some of the letters are formed in a very unusual manner. It contains a grant by the king of *Vidyánagar* (pronounced *Bijánagar*,) formerly the capital of *Carnát'aca:* and is dated little more than four hundred years ago. Grants, by kings of this dynasty, are not uncommon in the *Dekhin*; and may be of use in determining the dates of their several reigns. These princes were enlightened patrons of science: especially HARIMA'RA and BUCCA RA'YA sons of SANCAMA the founder of the dynasty.

MAJOR MACKENZIE forwarded a translation of this inscription made by his interpreter CAVELLY BORIA. The original is, in some instances, read differently by the *Pandits* whom I have consulted: not however making any change in the purport, nor in any material passage. The following translation is conformable to their interpretation: and the copy, which is subjoined, exhibits the text as read by them.

TRANSLATION.

1. 'SALUTATION to GANE'S'A. I bow to SAMBHU, graced with the beautiful moon crowning his lofty head; himself the pillar, which upholds the
2. origin of the three worlds *. May he, whose head is like an elephant's, the son of HARA †, the cause of uninterrupted supremacy, the giver of boons, and the luminary which dispels darkness ‡, preserve us.
3. May the auspicious primeval boar §, by whom

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* SÍVA, or MAHADEVA, is figured with the moon as a crest. According to mythology, he upholds the creator.

This, and the two following stanzas, seem to be the same which are found, but in a different order, at the beginning of the inscription on the plates preserved at the temple of *Conjeveram*: (As. Res. vol. 3. p. 39.) with some difference, however, in the reading and interpretation.

† GANESA, figured with an elephant's head, reckoned son of HARA or MAHADEVA and of his wife PARVATI.

‡ The original is here inaccurate: it exhibits *Turas tivra timira gihiro*; which means nothing, and in which a syllable is deficient for the metre. In the fac simile of another grant, the same passage is correctly written *Varadas tivra timira mihiro.*

§ The incarnation of VISHNU, as a boar, who upheld the earth submerged by the ocean, is well known to all who are conversant with Indian mythology.

closely embraced, the earth exults, grant us vast prosperity.

4. 'THE ambrosial moon, brother of the goddess *Ramá*, is the offspring of the milky ocean *, having a common origin with the gem *Caustubha*, the all-
5. productive tree and the ever beneficent cow. In the lunar race was born a king named YADU †, by a descendant of whom [CRĬSHNA] son of VASUDE'VA,
6. the earth has been protected. In his line arose a king named SANGAMA ‡, who abounded in weighty virtues, and shunned the society of the wicked.

7. 'THIS king had [five] sons, HARIHARA, CAMPA, BUCCARA'YA who was sovereign of the earth §, MA'RAPA and MUDGAPA.

8. 'AMONG these five graceful princes, the most celebrated was BUCCA sovereign of the earth, con-
spicuous for valor, as ARJUNA among the PA'NDA-
9. VAS. Therefore, did BUCCARA'YA, fierce in battle, become a fortunate prince, applying his left

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* The story of the churning of the ocean is familiar to every one.

† YADU, the celebrated ancestor of CRISHNA, was of the lunar race.

‡ The pretensions of SANGAMA to be descended from the lunar line of *Cshatriyas* or *Chandravansis* are here asserted.

§ The names of three of these princes, as well as of their father, occur in the writings of MAD'HAVA-ACHARYA, and of his brother SAYANA-ACHARYA, who were priests and counsellors of those monarchs.

HARIHARA RAJA, and BUCCANA RAJA or BUCCA RAYA, are named in MAD'HAVA's commentary on the *Vedas*, and CAMPA is mentioned in his grammatical works.

shoulder * to uphold the burden of the mighty elephants posted at the quarters of the world.
10. When his army, in warlike array, performed evolutions on the frontier of his dominions, the *Turashcas* felt their mouths parched; the *Cóncan'a*, terrified, apprehended impending death; the *And'hras* fled, in consternation, to the caverns; the *Gurjaras* trembled; the *Cambôjas* lost their firmness; and the *Calingas* were quickly discomfited †.

11. 'He was a conspicuous monarch, splendid, and a supreme ruler of kings, but acting towards disobedient princes, as the king of birds towards
12. serpents; embraced by the concubines of kings, destroying hostile chiefs, defending the heroes of *Hindú Ráya*, endowed with knowledge and other qualities ‡.

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* The text appears to exhibit the negative of *Dacshina* right. At the eight principal points of the compass, elephants uphold he world.

† This verse is extremely inaccurate in the original: it has been orrected with the aid of the fac simile of another grant beforemenioned. It begins *Yasyodd'haya yudd'he yudd'ha range*, which is unmeaning and contains too many syllables for the metre. It should e, as in the other inscription, *Yasyodyad yudd'ha range*. A syllale is wanting in *Turushcáh*, written *Tushcáh*. Two were deficient n *Bhaya bhara bharitah* expressed *Bhava bharitah*. Both inscriions write *Cámbojáh* for *Cambojah*. In one, *Sapari* is erroneously ut for *Sapadi*.

All the names of nations, which occur in this place, have been reeatedly explained.

‡ These stanzas are very obscure: and I am not confident, that ney are rightly translated. *Hindáraya* seems to be similar to the *Iindúpati* of *Bundelkhand*: for so the government of that country as denominated under the chiefs, who ruled it in the last and in ne preceding century.

The stanzas appear to be similar to two in the grant preserved at *Conjeveram*: viz. 25th and 26th. (As. Res. vol. 3. p. 47). But here is some difference in reading as well as in interpretation.

13. 'By that victorious king was *Vidyánagarí* made a permanent metropolis; a fortunate city, which is adapted to promote universal conquest *.

14. 'GAURA'MBICA' became his queen; a princess respectable for her virtues; as RAMA the beloved wife of CRĬSNA; as GAURÍ of S'IVA; as
15. S'ACHÍ, of INDRA; as SARASWATÍ, of BRAHMA'; 16. as CH'HA'YA', of SU'RYA †. By the charms of her graceful gaiety, she obscured TILÓTTAMA ‡; by her happy fidelity to her husband, she excited the envy of ANASU'YA' §.

17. 'THIS liberal prince, pre-eminent among kings, begot, on that divine princess ¶, a son named HARI-
18. HARA: who is become a protector of the good and punisher of the wicked; who has obtained his

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* *Vidyánagari* signifies the city of science. FERISHTAH was mistaken, when he affirmed, that it was founded by RAJA BELLAL DÉO and named after his son BIJA RAY. (SCOTT's History of Dekhan, Intr. p. xi.) It is believed to have been founded by the two brothers HARIHARA and BUCCA RAYA.

† The Gods and Goddesses, to whom this happy couple is here compared, are mentioned in the text by titles, some of which are uncommon; and have been therefore changed, in the translation, to others more generally known. RAMA is probably intended for RADHA as a representative of LACSHMI.

In the original, SARASWATI is called VANI; but the fac simile of the other inscription exhibits SAVITRI. SACHÍ is, in the original, erroneously written SACHI; and *jáma* occurs at the beginning of the verse for *nama*.

‡ TILLÓTTAMA is the name of a nymph celebrated for her beauty.

§ ANASUYA is wife of ATRI, and distinguished for conjugal affection. The name signifies unenvious.

¶ The princess is here termed GAURI, which is a title of PERVATÍ; and which conveys an allusion to her own name GAURAMBICA.

wish, with the wife; who is enviable, and is devoted to the god HARIHARA.

19. 'THE tree of virtue thrives by water poured with his donations*; while he shines with the splendid glory of sixteen kinds of gift†.

20. 'In the year 1317‡; and, of the cycle, *Dháta*; in the month of *Mágha* and light fort-
21. night; on the day of full moon; under the asterism sacred to the *Pitris (Maghá;)* on Sunday; upon the bank of the river *Tungabhadrá*, which is
22. adorned by the mountain *Hemacut'a*; in the pre-
23. sence of the auspicious deity, VIRU'PA'CSHA§; the valiant HARIHARA¶, revered among mortals, liberal in his gifts of land, and especially attentive to
24. venerable priests, has graciously given, with gold
22. and with a libation of water, to the auspicious de-
23. scendant of BHA'RADWA'JA and follower of the *Rigveda*, the wife VĬSHNUDĪCSHITA PAT'T'ABARDHÍ,
24. son of VA'CHESPATI surnamed BHILA; and to the learned A'NANTADĪCSHITA son of RA'MABHAT'T'A, a descendant of VASISHT''HA and follower of
25. A'PASTA'MBA'S *Yajurveda*, inhabitant of *Ruchangi*
28. (a place known to have been visited by the *Pándavas,)* the fertile and all productive village of *Má-*
25. *denahalli*, also named *Hariharapura*, situated in the
26. midst of *Bhilichedra*, east of the village called
27. *Arísícer*, south of *Gandicehalli*, west of *Pallavacat'á*, and north of *Bhudihalli*, a place to

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* Solemn donations are ratified by pouring water into the hand of the donee.

† Sixteen meritorious gifts are enumerated in treatises on donation.

‡ Corresponding to A. D, 1395.

§ A title of SIVA.

¶ The difference of idiom makes it necessary to transpose, in the translation, some of the verses of the original.

29. be honoured by all; marked on the four sides by distinct boundaries; together with its treasures, and hidden deposites, its stones and every thing which it
30. does or may contain; abounding with objects pleasing to the eye; fit to be enjoyed by two persons; graced with elegant trees; furnished with wells, cisterns, ponds and banks; to be successively
31. possessed by the sons, grandsons and other descendants [of the grantees], as long as the sun and
32. moon endure, subject to be mortgaged, sold or any way disposed of; a village visited by assiduous and gentle priests and attendants, and by various wise persons, who are conversant with holy rites, and surpass in voice melodious birds *.'

A PARTICULAR description of the bounds of the village, and its land marks, is next inserted in the *Cánara* language. After which the patent proceeds thus.

'THIS patent is of the king HARIHARA, the sole unalterable tree of beneficence, magnanimous, and whose sweet strains compose this royal grant. By his command this patent has been framed, expressed in due form, in the sacred tongue †.

'THE boundaries of the village on all sides, have been stated in the provincial dialect.

'OF original gift or confirmation of it, confirmation is superior to gift; by generous grants a man obtains heaven; by confirmation of them,

* Some parts of this long passage are obscure and doubtful. The last stanza, with two preceding, omitting one, (that is the 29th, 30th, and 32nd) appears to be the same with three which occur in the grant preserved at *Conjeveram*, viz. 43d, 44th, and 45th. (As. Res. vol. 3. p. 51.) But there are some variations between the reading of them in this inscription, and in the copy of the *Conjeveram* plates, from which Sir W. JONES made his version of that grant: and, in a few instances, the interpretation, which I have adopted, differs from his.

† This passage may indicate the artist's name, *Vánideva*.

an unperishable abode; for the confirmation of another's donation is twice as meritorious as a gift made by himself; and his own munificence is rendered fruitless by resumption of another's grants. He, who resumes land, whether bestowed by himself or by another, is born an insect in ordure for sixty thousand years. In this world is only one sister of all kings, namely land, which has been conferred on priests *: she must not be enjoyed nor espoused †. This general maxim of duty for kings, should be strictly observed by you in all times: so RAMACHANDRA earnestly conjures all future sovereigns ‡.'

'*Srí Virúpácsha*; or the auspicious deity with uneven eyes §.'

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* The terms may signify "fully granted away, or properly bestowed."

† In mythology, as well as in figurative language, the earth is wife of the sovereign. With an allusion to this idea, land, which has been granted away, is here called the king's sister: and his seizure of such land is pronounced incestuous.

The expression, which has been translated espoused, (*caragrahyá*, literally, to be taken by the hand), will also signify subjected to taxation: for *cara* signifies tax as well as hand.

‡ This appears to be a quotation from some poem (a *Purána* or *Rámayana*). The whole of the concluding part of the inscription (comprised in five stanzas) seems to be the same with the close of grant on plates of copper preserved at *Conjeveram*. See As. Res. vol. 3. p. 53.

§ This signature is in *Cánara* letters.

प्रभुः ॥ १६ ॥ अहीनपोमप्रभानिरसीराजशिखामणिः ॥ तस्यांहरिवरक्ष्मौर्त्यौकुमारमुदपादयत् ॥ १७ ॥
शिष्टान्संरक्षितायस्युदुष्टानामपिशासकः ॥ लब्धप्रतिष्ठोदुष्पारकंस्वाघोहरिहरेपरः ॥ १८ ॥ यस्मिन्
षाडशदानानियज्ञेपरिशोभिते ॥ दानाम्बुधारयायस्यवर्द्धतेधर्मपादपः ॥ १९ ॥ ऋषिभूवह्निचन्द्रे
गुणितेधातवत्सरे ॥ प्रथमाश्विशुक्लपक्षेपौर्णमास्यांमहातिथौ ॥ २० ॥ तस्यत्रेपितृदेवत्येप्रनुवारिणसंयु
क्ते ॥ तुङ्गभद्रानदीतीरेहेमकूटेपणेपिते ॥ २१ ॥ श्रीविरूपाक्षदेवस्यसन्निधेप्युमदाग्निने ॥ भारद्वाजस
गृणेत्रयवचोग्रेसरयव ॥ २२ ॥ वचस्तेर्मेलाख्यस्यसूनवेसूनृतोक्तये ॥ पट्टवर्द्धनिनीवेष्टुर्दीक्षितेन्द्रा
यधोमते ॥ २३ ॥ वणिक्कुलोद्भवजायापत्यंव्यणसाग्रयाग्निने ॥ एभद्रसुतनन्नयेक्षितायविपश्चिते ॥ २४ ॥

रिहरश्चाभून्मानमोयोम नस्तिनः ॥ भूयस्तपात्रभूतात्माभूसुरस्माविशेषतः ॥ २३॥ सहिरण्यपयोधारापू
र्वंकन्दत्तवानुदा॥ ——————॥ इदमखिलपजणास्तनमधुकरकुकारगीतमहात्मनः ॥ एशोहरिह
स्तपनिःसरणस्तमचलैकपरिजानस्व ॥ तस्यतच्छासनेनैवशासनंतुविनिर्मितं ॥ शासनाद्यंधर्मैरा
णिदैवनशिक्षितम्॥ अस्मिन्ग्रामेअष्टदिक्षुसीमादेशभाषयालिखिता ॥ दानपालनयोर्मध्येदानाच्छ्रेयोन
पालनं ॥ दानात्स्वर्गमवाप्नोतिपालनादच्युतम्पद ॥ स्वदत्तादद्विगुणपुण्यम्परदत्तानुपालनं ॥ परदत्तापहा
रेणस्वदत्तंनिःफलंभवेत्॥ स्वदत्तांम्परदत्तांवाशेहरेतवसुन्धरं ॥ षष्टिवर्षसहस्राणिविष्ठायांजायतेकृ
मिः ॥ एकैवभगिनीलोकेसर्वेषामेवभूभुजां ॥ नमोजानकरग्राह्यविपदत्तावसुन्धरा॥ सामान्योयंधर्मसे
तुर्नृपाणांकालेकालेपालनीयोभवद्भिः ॥ सर्वानेतान्भाविनःपार्थिवेन्द्रान्भूयोभूयोयाचतेएषचन्द्रः ॥ ❁ ॥

IV. *Another and similar Inscription found at the same place.*

WITH a fac simile of the foregoing inscription, Major MACKENZIE communicated the copy of another inscription found also at *Chitradurg* and in the same year. The whole of the introductory part, containing the name of the prince, and his genealogy, is word for word the same in both grants: excepting a few places, where the variations are evidently owing to mistakes of the artist, by whom the plates were engraved. I have consequently derived much assistance from this fac simile in decyphering the original inscription before described.

THE grant, here noticed, is by the same prince, and dated in *Saca* 1213; only four years anterior to the one before translated. I think it, therefore, unnecessary, to complete the decyphering of it, or to insert a copy or translation merely for the name and description of the lands granted, or the designations of the persons on whom they were bestowed.

CONCERNING the similarity of the grants, it may be remarked, that this circumstance is not a sufficient ground of distrust; for it cannot be thought extraordinary, that a set form of introduction to patents should have been in use; or that grants, made within the space of four years, by the same person, should be alike. I must acknowledge, however, that the inaccuracies of the original have impressed me with some doubt of the genuineness of the preceding grant. I do not, however, suspect it to be a modern forgery: but I apprehend, that it may have been fabricated while the upper *Carnát'aca* continued under the sole domination of *Hindu* princes. Still it may not be without its use, as an historical monument: since it may be fairly presumed, that the introductory part is copied from a more ancient monument; perhaps from that, with which it has been now collated.

V. *Inscription on a stone found at* CURUGÓDE *in the district of* ADONI *.

ANOTHER ancient monument, for the communication of which the Asiatick Society is indebted to the same gentleman, whose zeal for literary research, and indefatigable industry in the prosecution of inquiries, cannot be too much praised, was found by him in the upper *Carnát'aca* in 1801, and has been presented to the Asiatick Society, with the following account of its discovery and of the inscription which it contains.

'THE accompanying stone was found at *Kurugode*, fourteen miles north of *Ballári*, not far from the *Tungbhadrá*, among the ruins of the ancient town at the foot of the *Durg*; and was removed thence, in March, 1801, with the consent of the principal inhabitants, under the impression, that this specimen of ancient characters, with which it is covered, would be a desirable acquisition to gentlemen who cultivate the study of *Hindu* literature.

'THE inscription is chiefly written in the ancient *Cánará* language much mixed with *Sanscrit*, of which some of the *Slócas* or stanzas are exclusively composed. It commences with the invocation of SAMBHU (SIVA), and after introducing the grant, date, and description of the lands, concludes with several *Slócas* usually added as a formula in confirmation of such donations.

A FEW of the stanzas, said to be written in the *Prácrit* language, could not be understood by the *Sástrís* and *Pandits* at *Triplicane*, who explained the greatest part of the inscription to my *Brahmens*: by their

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* *Adavani.*

united efforts and knowledge, the accompanying translation was given, in which I have every confidence after the experience I have had of the fidelity of other translations by the same hands (some of which are already communicated).

'THE inscription is useful as an historical record, if the *Raja* RACSHAMALLA, mentioned here, be the same with the sovereign of the same name mentioned in a history of *Mysore*, who flourished about the eighth century; thus agreeing in date nearly with the monument.

'THE beauty of the character was also a strong motive for removing it, as an appropriate offering to a Society, whose labors have been so successfully employed in illustrating the interesting remains of *Hindu* antiquity; and a permanent specimen of a character which appears hitherto to have escaped much notice.

'THE common *Cánara* language and character are used by the natives of all those countries extending from *Coimbatore* *, north to *Balkee* † near *Beder*, and within the parallels from the eastern *Ghâts* to the western, comprehending the modern provinces of *Mysore* ‡, *Sera* ||, upper *Bednore* §, *Soonda* ¶, *Goa*, *Adoni*, *Rachore* ††, *Canoul* ‡‡, the *Duab* of the *Kishná* and *Tung-bhadrà*, and a considerable part of the modern *Subahs* of *Beder* and *Bijápur*, as far as the source of the *Kishná* at least. Its limits and point of junction with the *Mahrattas* may be yet ascertained with more precision; but in 1797, I had the opportunity of observing, that the junction of the three languages, *Telinga*, *Mahratta*, and *Canara*, took place somewhere about *Beder*.

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* *Cóyamutúr.* † *Phálaci.* ‡ *Mehisúr.* || *Sirá.*
§ *Bednúr.* ¶ *Sundá.* †† *Ráchur.* ‡‡ *Candanur.*

'BESIDES the common character and language, another appears to have been used, denominated at present the *Halla* or ancient *Cánara*, in which this inscription is written: it has gone so much into disuse, that it was with some difficulty I could get people to read it. An alphabet will be yet communicated; as several books and ancient inscriptions are written in this character: and the remaining literature of the *Jains* in *Bálághát'*, appearing to be preserved in it, affords additional motives for pointing it out to the attention of the learned, as probably affording means of extending the field of knowledge of *Hindu* literature.

'SOME of the inscriptions, at *Cánara* and *Salset*, appear to be written in this character; and many monuments of the kind, dispersed over the upper *Carnatic*, hold out the prospect of further information.

'AMONG several manuscripts in *Cánara*, five, relating to the *Jain* religion and customs, are in my possession.

'THE name of CAVELLY BORIA, a *Brahmen*, who was highly instrumental in forwarding and facilitating the investigations carried on in *Mysore* and the Nizam's dominions, is inscribed on the edge of this stone, as a small tribute to the zeal and fidelity of a native who evinced a genius superior to the common prejudices of the natives. He first suggested the idea of removing the stone to some place where it could be useful to *European* literature; and, by his conciliatory manner, obtained the concurrence and assistance of the natives for that purpose.'

THE stone, sent by Major MACKENZIE, with the foregoing account of the discovery of it, is nearly five feet high, and three wide, and about ten inches thick. The front is covered with writing in large characters, above which is a representation of the *Linga* in the form

usual in temples; it is surmounted by a sun and crescent; and near it stands a bull, intended perhaps for the bull called *Nandi*, a constant attendant of S'IVA: this is followed by the figure of a smaller animal, of similar form. The back of the stone is half covered with writing.

THE translation, mentioned by Major MACKENZIE, is here subjoined. Not being acquainted with the character, in which the original is written, I have not collated the version; and have therefore used no freedom with it, except that of substituting, in many places, English words for *Sanscrit*, which the translator had preserved.

TRANSLATION.

ADORATION *be to the auspicious* SWAYAMBHU' NA'T'HA *or* SELF-EXISTENT PROTECTOR.

1. 'I PROSTRATE myself before *Sámbhu:* whose glorious head is adorned with the resplendent moon; and who is the chief prop of the foundation of the three worlds *.

2. 'MAY SWAYAMBHU' be propitious: he, who won immortal renown; who grants the wishes of those that earnestly intreat him; who pervades the universe; the Sovereign Lord of Deities; who destroyed the state and arrogance of the demons; who enjoyed the delightful embraces of PA'RVATÍ, to whom the learned prostrate themselves: the God above all gods.

3. 'I PROSTRATE myself before SÁMBHU'; whose unquenchable blaze consumed the magnificent *Tri-*

* This is the same stanza, which begins the two inscriptions found at *Chitradurg*, and which likewise occurs in a grant in the possession of a *Brahmen* at *Nandigul*; and in that preserved at *Conjeveram*.

pura; whose food is the nectar dropping from the beams of the moon; who rejoiced in the sacrifice of heads by the Lord of *Rácshasas* *; whose face is adorned with smiles, when he enjoys the embraces of *Gauri*.'

(The foregoing *Sanscrit*: the fourth, which is *Prácrit*, is unexplained. Those which follow, are in *Cánará*.)

5. 'By the consort of De'vi, whose divinity is adored, the spouse of Pa'rvatí, resplendent with the glorious light of gems reflected from the crowns of the Lords of Gods and demons whose heads lay prostrate at his feet; with a face ever lighted up with smiles; he is the self existent deity: may the wealth, and the stations of his saints, be ever granted to us.

6. 'The beams of whose light, like the frequent waving of the *lotus* flower, flashes reflected from the numerous crowns of glorious Kings, of the chief of Gods, of the King of Kings, and of the Lord of Demons; who exists in all things, in all elements, in water, air, earth, ether, and fire, in the sun and moon: the renowned deity manifested in eight forms; Sambhu'; may he grant our ardent prayers.

7. 'Cheerfully I bow to Sambhu' in the *lotus* of the heart; to him who increases and gives life to all; who holds supreme command over all; who, through his three divine attributes, created and animated fourteen worlds; who ever resides in the minds of his saints.'

(The two next stanzas have not been explained. The following is in *Halla Cánara*.)

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* Ravana.

10. 'For ever be propitious to *Sómés'wara Dévadi*, the son of the fortunate Bhuvana Malla Víra, the protector of the world, the chief Sovereign of Kings, the pre-eminent monarch, a man of superior virtue, a distinguished personage of the noble race, the ornament of the *Chaluca* tribe, whose state be increased progressively in this world, so long as the sun and moon endure; who reigns in the city of *Calyán*, enjoying every happiness and good fortune, with the converse of good men and every other pleasure. In this country of *Cuntaladésa* *, a land renowned for beauty and for manly strength over all the sea-girt earth, is situated *Condaviṗattan*, placed as the beauty spot on the human face; a city favoured by the goddess of prosperity; as a nosegay of elegant flowers adorning the tresses of the beauteous goddess of the earth.

11. 'How is this favored land? In its towns are numerous groves of mangoe; plantations of luxuriant betle and fields of rice: in every town are channels of water, and wells, opulent men and beautiful women: in every town are temples of the Gods and of the saints: in every town are men blessed with vigor and every virtue.

12. 'In its centre, is the mighty hill of *Curugôdedurg*, like the fastnesses † of heaven, ever famed, rearing aloft its top crowned with fortresses. In height and compass surpassing all the strong hills on the right or left.

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* *Cuntala Desa*, the ancient name of the province in which *Curgode* is situated; part of the *Ballári* or *Adoni* District. M.

† The poet indulges his fancy in describing this favored *Durg*; but in fact it is only about 250 feet high, and no ways remarkable for strength. M.

13. 'This *Curagóde* was established as the capital of his dominions by the king of *Cuntala*, who was the foe of the king *Chóla* *; who terrified the *Gurjara*; who is the instrument to destroy the plants of *Madru*; who put *Pándya* to flight. Is it possible for the king of snakes, though possessed of a thousand tongues, to praise sufficiently the beauty of this city?

14. 'What is the description of the delightful gardens that encompass the city? They are gardens wherein are found the *Tilac*, the *Tamâl*, the palm, the plantain, the Mimusops, the trumpet flower, the tremulous fig-tree, the citron, the Oleander, Mesua, and Cassia, the cotton-tree, the Carambola and Pœderia, the mangoe, Butea and fragrant *Nalicá*; and various trees, that flourish and produce through all seasons as in the garden *Nandan:* these surrounded this city of *Curogóde*.'

(The fifteenth stanza is unexplained.)

16. 'In the city of *Curugóde*, the residence of the goddess of prosperity, where are numerous temples of worship, fertile lands, happy spouses, friendly intercourse, a favorable government, every sacred decoration and zealous devotion in the service of S'iva;

17. 'The Lord of that city, a warrior unrivalled, whose name was Racsha'malla, whose breast is tinged with the saffron communicated from the bosom of beauty, whose renown is ever praised over the whole world.'

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* *Chóla Désa*, . . . The modern Tanjore country.
Gurjara, . . . Guzarat.
Madru, . . . Madura and Trichinopoly.
Pándya, . . . Marawar and Tinevelly. M.

(THE eighteenth stanza is in *Prácrit*, and not explained.)

19. 'This *Raja* RACSHA'MALLA, prince of the earth, born of so renowned a race of sovereigns, was happily possessed of valor, of victory, and of wealth.

20. 'FOR the king RACSHA'MALLA, who was lord of riches and a devout worshipper of SIVA, had for his consort SÓMALDE'VI' and begot a son named NE'RUNGALA RA'JA', husband to the goddess of renown, the bestower of wealth on the distressed, on the learned, and on the unfortunate, to the utmost extent of their wishes.

21. 'TO NE'RUNGALA RA'JA' and to his wife PACSHALA'-DE'VÍ (the source of all virtues), were happily born two sons named IMA'DI RACSHA'MALLA and SÓMABHU'PA'LA, whose renown, like the sky, overspread the whole earth.

22. 'WHAT is the description of the eldest of these princes? *Imádi* (or the second) RACSHA'MALLA RA'JA', the successor of the former, seated on the excellent throne, attended by many mighty elephants, in colour like the *Chamarí* *, ruled the whole kingdom under one umbrella, possessing the wonderful power, like CHINNA GÓVINDA, of feeding tigers and sheep in the same fold.

23. 'THE king RACSHA'MALLA acquired great power: his mighty splendor and good fortune were such as drew the applause of the whole admiring world. The globe was filled with the light of his reputation. The beauty of his person is worthy of the praise even of Cu-

* Bos Grunniens.

pid, the God famed for beauty. He was the destroyer of sin; eminent above foreign kings, and in battle he was as VISHNU.

24. 'MAY MRĬTU [SIVA] graciously bestow eternal wealth and prosperity of empire, on the king RACSHA'-MALLA, among all his chief saints.

'DURING the gradual increase of the empire of RACSHA'MALLA extending from the north, all around, even to the north, his servant and worshipper, a descendant of CASYAPA's race, manager of the affairs of TALGARA' AMARÍ, invested with full authority; equal in knowledge to YUGAND'HAR, the sun to enlighten the caste of *Vajínasa* [as the sun enlightens the sky;] chief of ministers, born by the blessing of the god SWAYAMBHU', the source of wealth, was BA'BARA'JU'.'

(SEVERAL lines follow giving an account of the ancestors of BA'BARA'JU', which have not been translated.)

'Such is BA'BARA'JU, who built a temple to the God SWAYAMBHU' DE'VI', while he was managing the affairs of his sovereign lord, the mighty king, the great RACSHA'MALLA, whose god was the self-existent deity.'

'THE praise of the priests of the temple.

'THEY were learned in the sacred ceremonies of holy devotion, self-restraint, in austere fast, appropriate studies, alms, remembrance, silence, religious practice, and the worship of S'IVA.

'THEY were devout in performing the ceremonies of the worship of the gods of the family. Among them, was one named BA'LASIVA A'CHAR'YA unequalled for a

good or happy genius. To this famous BA'LA'SIVA A'CHA'RYA was granted this gift with water poured into his hands.

'THE charitable donation of lands given to the good SWAYAMBHU' in the year of *Sálivâhan* 1095 * in the *Vijaya* year of the cycle and on the 30th of the month *Márgasíra*, on Monday in the time of an eclipse of the sun.'

(IT appears unnecessary to insert the description of the lands.)

'Also CHINNA GÓVINDA SÍTARA GUNDI, king of the city of *Bhógavati*, equal to the sovereign of *Bhat'-t'ál*, who was acknowledged for ever by the excellent VÍRACA'LÍDEVA' the mighty king of the earth named IMA'DI RACSHA'MALLADEVA. In the year of *Sálivá-han* 1103 †, of the cycle *Plava*, and on the 15th of *Cártica*, on Monday, in the gracious time of the moon's eclipse, at the time when he made over in alms *Tripura Agraharam*, granted under DA'RA'PU'RBAC to BA'LASIVA DE'VA, who repaired all the buildings of SWAYAMBHU'DE'VA who is distinguished for knowledge of the pure *Védas*, and of other religious institutions and customs of the worshippers of S'IVA, and for charity in feeding the poor.

(The sequel of the inscription is likewise omitted: it relates to a further grant made by the widow of BA'-BARA'JU', at the time of her burning herself with the corpse of her husband. The concluding part of it was left untranslated, being stated to be illegible.)

THE eclipses, mentioned in these grants, do not appear reconcileable with their dates. According to the ta-

* Answering to A. D. 1173. † Corresponding to A. D. 1181.

ble of eclipses calculated by PINGRE*, the solar eclipses, which occurred in 1172 and 1173, fell on 27th January and 23d June, 1172, and 12th June, 1173; and the lunar eclipses in 1180 and 1181, were on the 13th February and 7th August 1180, and 22d December, 1181. None of these approach to the dates of *Márgasira* or *Agraháyana* 1095 and *Cártica* 1103. Unless, then, the era of *Sálivâhana* have been counted differently in the peninsula of *India*, from the mode in which it is now reckoned, and on which the comparison of it with the Christian era is grounded, it seems difficult to account for this disagreement of the dates and eclipses, in any other way, than by impeaching the inscription, the authenticity of which there is not otherwise any reason to question.

VI. *Inscription on a Stone found at* KURRAH.

HAVING learnt from Captain C. STEWART, (a Member of this Society), that an inscription had been remarked by him in the gateway of the Fort of *Kurrah (Kharâ)*, I obtained, through the assistance of Major LENNON, then stationed in the vicinity of that place, the stone itself which contains the inscription. It now belongs to the Asiatick Society.

THE inscription is very short; contains the date 1093 *Samvat*, the name of the prince, as also names of several places; and is written in a very legible character: yet all my endeavours to arrive at any explanation of it have been unsuccessful. Whether, it be only a fragment of

* Published in L'art de verifier les dates; and inserted in PLAYFAIR's System of Chronology.

an inscription (for the stone is very narrow *,) or the inscription have been inaccurately engraved (and this also is countenanced by its appearance), I shall not take upon myself to determine. At present, I can only translate the first six, out of sixteen lines, which run thus: "*Samvat* 1093 †, on the first day of the light fortnight of *As'hád'ha*. This day, at this auspicious *Catá*, the great and eminent prince YAS'APHA'LA ‡, in the realm of *Causámba*, and village of *Payahása*, commands, that ————————."

संवत् १०९३
आषाढशुदि १
अद्येह श्रीमत्कटे
महाराजाधिराज
श्रीयश:पाल:कौ
शाम्बमण्डलेपयहा
ग्रग्रामेमहत्तम
दुसमादिश नियथा
यलेसेकीयमाथ
रविकृष्णसन
त्वप्रसादिद्वान्यमन्व
ग्रहसेवाऊरहिर
त्वप्रत्यादायादिकं

मस्त्वापनेतव्यमिति
दशवन्वेनसहपिकं
ठालंक्रत— — —
दुएपात्रा— — — —
— — — — —

* Its height is 4 feet 9 inches, but it is only 9 inches wide.

† Corresponding to A. D. 1037.

‡ It may be worth remarking, that the inscription, discovered at *Sáranát'ha* near *Benares*, dated 10 years antecedent to this, relates to a family of princes whose names had a similar termination. Asiatick Researches, vol. 5. p. 133.

VII. *Inscription on a Plate of Copper found in the district of* DINA'JPUR.

IN the beginning of the present year (1806,) a plate of copper was found at *Amgách'hi* in *Sultánpur*, by a peasant, digging earth for the repair of a road near his cottage. He delivered it to the nearest police officer, by whom it was conveyed to the Magistrate, Mr. J. PATTLE: and by him forwarded for communication to the Asiatick Society. *Á'mgách'hi*, though now a small village, is described as exhibiting the appearance of having formerly been a considerable place. Remains of old masonry are found there; and numerous ponds are remarked in the vicinity of that and of the adjacent villages. It is situated at the distance of about fourteen miles from *Budál*; where an ancient pillar stands, of which a description (as well as the inscription, which is read on it), was published in the 1st volume of Asiatick Researches, (p. 131.)

THE plate is very large, being 14 inches high and 13 broad. It is surmounted by a highly wrought ornament of brass, fixed on the upper part, and advanced some distance on the plate so as to occasion a considerable break in the upper lines. The superior surface is covered with writing in very close lines and crowded characters. The inscription is completed on the inferior surface, which contains 16 lines (the upper surface having no less than 33). The character is ancient *Dévanágari*; and the language *Sanscrit*: but so great a part of the inscription is obliterated, (some portion of every line being illegible,) that it is difficult to discover the purport of the inscription. After wasting much time in endeavouring to decypher the whole of it, I have been able only to ascertain the name of the grantor, and a part of his genealogy; with

the date of the grant, which unfortunately is reckoned only by the reign, without any reference to a known era.

THE ornament, affixed to the plate, and representing a seal, contains a single line of writing, which is distinctly read, SRÍ VIGRAHAPA'LADE'VA. This name, as of the grantor, is found at the close of the inscription; and it occurs more than once in the body of the patent. Among his ancestors and predecessors, the following names are distinctly legible.

THE first prince mentioned is LÓCAPA'LA, and after him DHARMAPA'LA. The next name has not been decyphered: but the following one is JAYAPA'LA, succeeded by DE'VAPA'LA. Two or three subsequent names are yet undecyphered *: they are followed by RA'JAP'ALA,——PA'LA DE'VA, and subsequently MAHÍPA'LA DE'VA, NAYAPA'LA and again VIGRAHAPA'LA DE'VA.

So far as a glympse has been yet obtained of the purport of the inscription, it seems to be a grant by VIGRAHAPA'LA DE'VA, in the making of which NAYAPA'LA likewise appears to have had some share. It is dated *Samvat* † 12, on the 9th day *Chaitra*.

THE use of the word *Samvat* (which properly signifies a year) to denote the year of the king's reign, and not that of VICRAMA'DITYA's era, merits particular notice. In the inscription on the plates found at

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* One seems to be NARAYANA; perhaps NARAYANAPALA.

† The original seems to exhibit *Samat*: but this must be intended for *Sambat* or *Samvat*.

Mongír *, containing a grant of land by a prince who appears to be of the same family, the date was read by Mr. WILKINS, *Samvat* 33; which was supposed both by him and by Sir W. JONES to intend the era of VICRAMA'DITYA †. I have always entertained doubts of that interpretation: and, among other reasons for hesitating, one has been the improbability, which to my apprehension exists, that the era should have been in use, and denoted by the same abbreviated term, so early after the time at which it commences. Eras, by which nations have continued to reckon for a series of ages, have not usually been introduced until a considerable time after the event from which they are counted: and, when first introduced, have been designated by some more definite term than one merely signifying a year. But the word *Samvat* (abbreviated from *Samvatsara* a year,) being in that inscription prefixed to a low numeral, and not expressly restricted, as is usual where VICRAMA'DITYA's era is meant, was more likely to intend the year of the reigning king (though Sir W. JONES thought otherwise ‡,) than that of a period reckoned from the birth, or the accession, or the demise, of another monarch. It appeared to me likewise, as to Captain WILFORD, on examining the fac simile of the inscription in question §, that the character, which stands in the place of the *t* of *Samvat*, resembled more nearly the numeral 1. The date might therefore be 133 instead of 33. I inclined, however, to believe the lower number to have been rightly read by Mr. WILKINS on the original plate:

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* As. Res. vol. 1. p. 123.
† Ibid. p. 130.
‡ Ibid. p. 142.
§ Plates 1 and 2 in the 1st vol. of As. Res.

and consequently supposed it to be the date of the reign of DE'VA'PALA the prince who made the grant. The date of the *A'mgâch'hi* plate, which must be referred to the reign of the grantor VIGRAHBPA'LA, seems strongly to corroborate this opinion.

THE present inscription, though yet imperfectly decyphered, appears to be useful towards ascertaining the age of the *Mongír* grant. The names of DHERMAPA'LA and DE'VAPA'LA occur in both inscriptions; as that of RA'JAPA'LA does, on the pillar at *Budál*, as well as on the *A'mgách'hi* plate. Some of these names are also found in the list of princes enumerated in the *Ayín ácberí* * as having reigned in *Bengal* before BALLALASE'NA. The authority of ABU'LFAZL, on *Hindu* history, is indeed not great: but the inscription on the statue of BUDD'HA, which was found at *Sáranát'ha*, near *Benares* †, proves, that a family of princes, whose names terminated in *Pála*, did reign over *Gaud'a* in *Bengal*, near eight hundred years ago: and this is consistent with the period to which that dynasty is brought down by ABU'LFAZL; namely the middle of the eleventh century of the christian era. It appears also, from the same inscription found at *Sáranát'ha*, that these princes were worshippers of BUDD'HA, a circumstance which agrees with the indications of that faith in the *Mongír* grant, as translated by Mr. WILKINS. The name of MAHÍPA'LA, mentioned as king of *Gaud'a* in the *Sáranát'ha* inscription, occurs likewise in the *A'mgách'hi* plate; and if it be reasonable to believe, that the same person is intended in both instances, it will be right to infer, that the grant contained on the plate found at *A'mgach'hi* is nearly eight hundred years old; and that the plate

* Vol. 2. p. 26.
† As. Res. vol. 5. p. 133.

found at *Mongír* is more ancient by two or three centuries. This reduces the age of the *Mongir* grant to the eighth or ninth century of the christian era; which I cannot but think more probable, than the opinion of its being anterior to the birth of Christ.

VIII. *Inscriptions on Plates of Copper at* NIDIGAL *and* GOUJDA.

To the foregoing description of several monuments, which have been presented to the Asiatick Society, I shall add a brief notice of two other inscriptions, of which copies have been received.

MENTION has been already made of a grant of land, inscribed on five plates of copper, seen at *Nidigal*, in the year 1801. It was in the possession of a *Bráhmana* residing at that place: and a copy of it was taken by Major MACKENZIE, which has been communicated by him to the Society. The grant appears to be from the second BUCCA RA'JA', who was third in succession from the first prince of that name, and grandson of the king by whom the grants beforementioned were made. If the date have been correctly decyphered from the copy of this inscription, it is of the year 1331 *Saca*, corresponding to A. D. 1409.

ANOTHER inscription, communicated by Major MACKENZIE, purports to be a grant by JANAME'JAYA, the celebrated monarch who reigned in India at the commencement of the present age or *Caliyuga*. It is in the hands of the *Bráhmens* or priests of *Goujda Agraharam* in *Bédnúr*; and was, with some reluctance, entrusted by them to Major MACKENZIE, who himself took from it a copy in fac simile, the exactness of which is demonstrated by the facility with which the inscription may be decyphered from that copy. The original is described as contained in

three plates of copper, fastened together by a ring, on which is the representation of a seal, bearing the figure of a boar with a sun and crescent. The purport of the inscription, for I think it needless to make a complete version of it, is that 'JANAME'JAYA, son of PARÍCSHIT, a monarch reigning at *Hastináp'ura*, made a progress to the south, and to other quarters, for the purpose of reducing all countries under his domination; and performed a sacrifice for the destruction of serpents, in presence of the god (or idol) HARIHARA, at the confluence of the rivers *Tungabhadrá* and *Haridá*, at the time of a partial eclipse of the sun, which fell on a Sunday in the month of *Chaitra*, when the sun was entering the northern hemisphere; the moon being in the *Nacshatra A'swini* *.'

HAVING completed the sacrifice, the king bestowed gold and lands on certain *Bráhmanas* of *Gautamagráma:* whose names and designations are stated at full length, with the description and limits of the lands granted. The inscription concludes with two verses; the same with two of those which occur in the plates found at *Chitradurg* †; and in those preserved at *Conjeveram* ‡.

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* Such is the deduction from the text, which states a half eclipse of the sun in *Chaitra*, on the sun's entrance into the *Uttaráyana*, or northern path, at the moment of *Vyatipáta* (which imports new moon on a Sunday in any one of the undermentioned *Nacshatras*, viz. *Aswini*, *Sravaná*, *D'hanisht'ha*, *Ardrá*, *Astésha*, and *Mrigasiras:* the first of which is the only one compatible with the month). The words of the text are *Chaitramásé crishna* [should be *cris(na)* *pacshé só* . . . . . *carana uitárayana san* . . . . . *vyatipáta nimittá súrya parvani ardha grása grihita* [should be *grihita*] *samaé* [should be *samayé*].

In the places marked with dots, the letters are wanting in the original.

† See page 420 of this volume.

‡ As. Res. vol. 3. p. 52. The verses are those numbered 50 & 54.

If reliance might be placed on this as an ancient and authentick mounment, its importance, in the confirmation of a leading point of *Indian* history, would be obvious and great. Major Mackenzie, in communicating the copy of it, expresses a doubt of its authenticity; but remarks, that it can be no modern forgery, for the people themselves cannot read the inscription. I concur with Major Mackenzie both in distrusting the genuineness of this monument; and in thinking, that it is no recent fabrication.

Numerous and gross errors of grammar and orthography *, which can neither be explained by a gradual change of language, nor be referred to the mistakes of a transcriber or engraver, but are the evident fruit of ignorance in the person who first penned the inscription in *Nágarí* characters, would furnish reason for discrediting this monument, were it otherwise liable to no suspicion. But, when to this circumstance are added the improbability of the copper plates having been preserved during several thousand years, and the distrust with which any ancient monument must be received, where its present possessor, or his ancestor, may have had claims under the grant recorded in it, there can be little hesitation in considering this grant of Janame'jaya

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* For example *Samaé* for *Samayé* (समए for समये) a palpable error obviously arising from the blunder of an ignorant amanuensis writing from dictation. The mistake occurs more than once; and can be accounted for, in no other manner: the syllables *é* and *yé* being alike in sound, though dissimilar in form; and the blunder being such, as no person, acquainted with the rudiments of the *Sanscrit* language, could have committed. Other instances have been remarked, almost equally strong: as *Paricshiti* for *Paricshit*; *Chacravrartti* for *Chacravartti*. Short vowels for long, and vice versâ, in repeated instances; the dental for the palatial *s*; and numerous other errors of spelling; besides faults of grammar and style.

as unauthentick: independently of any argument deduced from the character, which is not perhaps sufficiently antique; or from the astronomical data in this inscription, which, however consistent with *Indian* notions of astronomy and chronology, will hardly bear the test of a critical examination.

IX. *A grant of Land by* JAYACHANDRA, *Rájá of Canoj.*

IT may be proper to notice further, in this place, the inscription of which mention was made at the beginning of this essay, as having been decyphered by a *Pandit* (SERVÓRU TRIVE'DÍ) who communicated to me a copy of it, with the information, that the original has been conveyed to *England* by the gentleman in whose possession it was seen by him. According to that copy, the genealogy of the prince, who made the grant recorded in the inscriptions, is as follows:

1. S'RÍPA'LA, a prince of the solar race.

2. HIS son MAHÍCHANDRA.

3. S'RÍCHANDRA DE'VA, son of the last mentioned; acquired, by his own strength, the realm of *Gád'hipura* or *Canyacubja (Canoj;)* visited *Cás'í* and other holy places; and repeatedly gave away in alms his own weight in gold. He appears to have been the first king of *Canoj*, in this family.

4. MADANAPA'LA DE'VA, son and successor of S'RÍCHANDRA.

5. GÓVINDA CHANDRA, son of MADANAPA'LA.

6. VIJAYA CHANDRA D'EVA, (the same with JAYA CHAND,) son of GÓVINDA CHANDRA; is stated in the inscription as issuing his commands to all publick officers and to the inhabitants of *Náguli* assembled

at *Devapallípatan'á*, enjoining them to observe and obey his patent: which is recited as a grant of land to two *Bráhmanas*, conferred by him, on the day of full moon in *Mágha* 1220 *, subsequently to his inauguration as *Yuva rája* or designated successor and associate in the empire. The inscription concludes by quoting, from a *Purána*, four stanzas to deprecate the resumption of the grant: and by a signature importing "this copper was engraved by JAYAPA'LA."

WITHOUT having having the seen the original, no opinion can be offered on the probable genuineness of this monument. But it will be observed, that the inscription is consistent with chronology: for JAYA CHAND, who is described, in the *Ayin acberi* †, as supreme monarch of India, having the seat of his empire at *Canoj*, is there mentioned as the ally of SHEHA'BUDDÍN in the war with PRĬT'HAVÍ RA'JA or PIT'HÓRA', about the year of the *Hejira* 558, or A. D. 1192: twenty-eight years after the date of this grant.

REMARKS.

A FEW observations on the general subject under consideration, will terminate this essay.

MOST of the ancient monuments, which have been yet discovered, contain royal grants of land; framed, commonly, in exact conformity to the rules delivered by *Hindu* writers who have treated of this subject ‡. That durable memorials have been usually framed to

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* Correspoding to A. D. 1164.
† GLADWIN's Translation, vol. 2. p. 119.
‡ As. Res. vol. 3. p. 50. Digest of *Hindu* law, vol. 2. p. 278.

record other events or circumstances, there is no reason to suppose; and this consideration is sufficient to explain the comparative frequency of monuments which recite royal grants. It was the interest, too, of persons holding possession under such grants, to be careful in the preservation of the evidence of their right. But this circumstance, while it accounts for the greater frequency of monuments of this description, suggests a reason for particular caution in admitting their genuineness. Grants may have been forged in support of an occupant's right, or of a claimant's pretensions. It will be, therefore, proper to bring a considerable portion of distrust and jealousy to the examination of any inscription on stone or metal, alledged to be ancient, and now possessed by persons who have any claims or pretensions under the grant which it contains. But no such cause of jealousy exists, where the monument in question favours no one's pretensions, and especially where it is accidentally discovered after being long buried. It is indeed possible, that such a monument, though now casually found, may have been originally a forgery. But even where that may be suspected, the historical uses of a monument fabricated so much nearer to the times to which it assumes to belong, will not be entirely superseded. The necessity of rendering the forged grant credible, would compel a fabricator, to adhere to history and conform to established notions: and the tradition, which prevailed in his time, and by which he must be guided, would probably be so much the nearer to the truth, as it was less remote from the period which it concerned.

In the present state of researches into *Indian* antiquities, the caution here suggested appears to be that which it is most requisite to observe. When a greater number of monuments shall have been examined and

compared, more rules of criticism may be devised; and will, at the same time, become particularly requisite, should the practice arise of purchasing ancient monuments; or of giving rewards for the discovery of them. At present no temptation exists for modern fabrications, and little caution is therefore necessary to avoid imposition.

NOTE to Vol. 7. Page 180.

A PASSAGE in the preface of the *Sárngadhara padd'hati*, and another in the body of that work, which were first indicated by Capt. WILFORD *, show, that a term, contained in the inscription on the column at *Delhi*, for which I proposed to substitute, with the advice of the *Pandit* who assisted me, the word '*Bahujata*' as a conjectural emendation, must be read '*Chahúmana*,' or '*Chahavana*;' being the name of the tribe to which the prince, there mentioned, belonged, and which is well known at this day under the appellation of *Chäuhan*. In the preface, SA'RAGAD'HARA describes himself as second in descent from RAGHUDE'VA, a priest attending on HAMMÍR king of *S'acambhari*, of the tribe of *Chäuhan*, *Chahuvan*, or *Bahuvana* (for the name is variously spelt in different copies.) The work itself is a compilation of miscellaneous poetry arranged under distinct heads; and one chapter (the 73d) is devoted to the admission of stanzas concerning individual princes. Among them two stanzas occur, which are there cited as an inscription on a royal column of stone erected as a sacrificial pillar †; and which on comparison, are found to be the same with the two first of the stanzas on the pillar at *Delhi*. Several copies of the *Sarngadhara padd'hati* have been collated: in all of which, the term in question is written *Bahuvana*. Comparing this with the preface of the same compilation, and with the inscription itself, we may be allowed to conjecture, that *Chahuvana* is the correct reading: the *Nagari* letters व and च being very liable to be confounded.

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* Page 189 of this volume.

† एतौ नृपतिपाषाणयज्ञयूप प्रशस्ती ॥

On the GRA'MAS *or* MUSICAL SCALES *of the* HINDUS.

BY J. D. PATERSON, ESQ.

WHEN music was first reduced to a science, it is probable, that it was confined to the few scientific men, whose education and studies fitted them to understand its principles; and that the first efforts of the science were displayed in hymns to the deities: each being addressed in a peculiar mode, rhythmus, and expression.

ACCORDING to PLATO *, the *Egyptians* were restricted by their laws to certain fixed melodies, which they were not permitted to alter; he says, that the lawgivers of *Egypt* appear to have laid it down as a principle, that "Young men in cities should be accustomed to beautiful figures and beautiful melodies, and that it was one of their institutions to *exhibit in their temples* what these were, and what the qualities which they possessed; and besides these it was not lawful either for painters or other artificers to introduce any that were new, or even to think of any other than those belonging to their country." He adds, "Nor is it lawful at present to do this either in these particulars or in the whole of music. If you observe, therefore, you will find, that paintings and sculptures there, which were executed ten thousand years ago, as if they were not of such great antiquity, are neither more beau-

* On Legislation. Dialogue 2d.

tiful nor more deformed than the paintings or carvings of the present day, but are fashioned by just the same art."

When Clinias observes, that he spoke of a wonderful circumstance, he replies, "It is, however, a circumstance pertaining to law and politics in a transcendent degree, you will likewise find other things there of a trifling nature, *but this respecting music is true and deserves attention*, because the legislator could firmly give laws about things of this kind and with confidence introduce such melodies as possessed a natural rectitude: *but this must be the work of a God*, or of some divine person; just as they say there, that their melodies, which have been preserved for such a length of time, are the *Poems of Isis*."

Plato considers this restriction as proper and necessary to prevent the introduction of sensual licentiousness and effeminacy. There appears to have been some such idea of restriction, amongst the antient *Hindus*, by the confinement of their music to thirty-six melodies: viz. the six *Ragas* and thirty *Raginis*: the forty-eight *Putras* are melodies, which seem to have been introduced in after times, when the discipline, alluded to by Plato, had begun to be relaxed.

But the *Indian Ragas* and *Raginis* are fixed respectively to particular seasons of the year and times of the night or day. This is a circumstance particularly deserving remark, as it is probably peculiar to the *Hindu* music.

It is likely, that these melodies were in former times appropriated to the service of different deities. In such case, the *Ragas* or *Raginis* would derive their appropriation to particular times and seasons, from the times

and seasons allotted by the *Hindu* ritual for the performance of the services, to which they were respectively appropriated. This appears probable: but whatever might have been the original cause of this apparent singularity, it has become so completely engrafted on the ideas of music amongst the natives of *India*, that they cannot at this day divest their minds of the prejudice. The muslemans have universally adopted it; and a performer, who should sing a *Raga* out of its appropriated season, or an hour sooner or later than the time appointed, would be considered as an ignorant pretender to the character of a musician. This restraint upon their music, which *Europeans* would think insupportable, the *Indian* considers as absolutely necessary to give a true relish to the melody. The origin of this custom seems lost in antiquity. No *Hindu*, with whom I have conversed, has been able to account for it. We may, therefore, suppose it probable, that it originated, as I have observed before, in the religious restraints to which music appears to have been subjected, when first reduced to fixed principles as a science.

Music must have been cultivated in very early ages by the *Hindus*; as the abridged names of the seven notes, viz. *sa*, *ri*, *ga*, *ma*, *pa*, *dha*, *ni*, are said to occur in the *Rama Veda*; and in their present order. Their names at length are as follow:

Shadja pronounced	*Sarja* or *Kharja.*
Rĭshabha pronounced	*Rikhabh.*
Gand'hara.	
Madhyama.	
Panchama.	
Dhaivata.	
Nishada pronounced	*Nikhad.*

HENCE we find, that the abovementioned abbreviated names of these notes, which are used in what we call *Solfaing* or *Solmization*, are the first syllables of their names, viz. *sa*, *ri*, *ga*, *ma*, *pa*, *dha*, *ni*. The complete scale is called *Swaragráma* or assemblage of tones; it is likewise called *Septac* or *heptachord*, as containing, or consisting of, seven notes.

THE *Hindus* place the seven notes under the protection of seven *Ad'hisht'hátrí Dévatás*, or superintending divinities, as follow:

Shadja, under the protection of AGNI.
Rishabha, of BRAHMA.
Gándhára, of SARASVATÍ.
Mad'hyama, of MAHA'DE'VA.
Panchama, of SRÍ or LACSHMÍ.
Dhaivata, of GAN'E'S'A.
Nisháda, of SU'RYA.

OF these notes, there are four descriptions: 1st the *Bádi*, which is the *Ans'a* or key note; and is described as the *Rájá* on whom all the rest depend; the 2d is *Sanbádi* which is considered as the *Mantrí* or principal minister of the *Rája*; the 3d are *Anubádi*, described as subjects attached to their Lord; 4th *Bibádi*, mentioned as inimical to him *.

* The three last distinctions seem to correspond to the *Homophonia*, *Paraphonia*, and *Antiphonia* of the *Greeks*. GAUDENTIUS, in his Harmonick Introduction, explains *Paraphonia*, a mean between consonance and dissonance; where the sound, to the ear, appears consonant. H. T.

THE *Hindus* divide the octave into twenty-two intervals, which are called *S'ruti*, by allotting four *S'ruti* to represent the interval which we call a major tone, three to describe a minor tone, and two the semi-tone: not as being mathematically just, but as means of representing to the eye, and to the understanding, the supposed relations which these intervals bear to each other; merely to show, that a semi-tone is half a major tone, and that the minor tone is a medium between the major and semi-tone, being less than the former and greater than the latter. Mathematical calculation is out of the question.

PERHAPS they were induced to make this division of the octave, by considering the minor tone as not divisible by two, without a fraction; and therefore made the whole number three, to represent it: for, if we divide the octave into twelve semi-tones, this will give twenty-four quarter tones or *S'ruti*; but by allowing three to represent each of the two minor tones, instead of four, there will remain only twenty-two, the number of *S'ruti* admitted.

THE *S'rutis* are personified as so many nymphs; and, in the *Sangita Reetnácara*, are thus named and arranged †.

To *Shadja* or *Sa* 4		To *Rĭshabha* or *Ri* 3	
	Tibra		*Dayávati*
	Cumudvati		*Renjani*
	Mundá		*Reticá*
	Chandovya		

† The names, exhibited in the *Sangita Dámódara*, are quite different. They seldom occur except in the writings of authors treating on music. H. T. C.

To *Gândhára* or *Ga* .... 2 { *Rudri* / *Cród'há*

To *Dhaivata* or *Dha* ... 3 { *Madanti* / *Róhini* / *Ramyá*

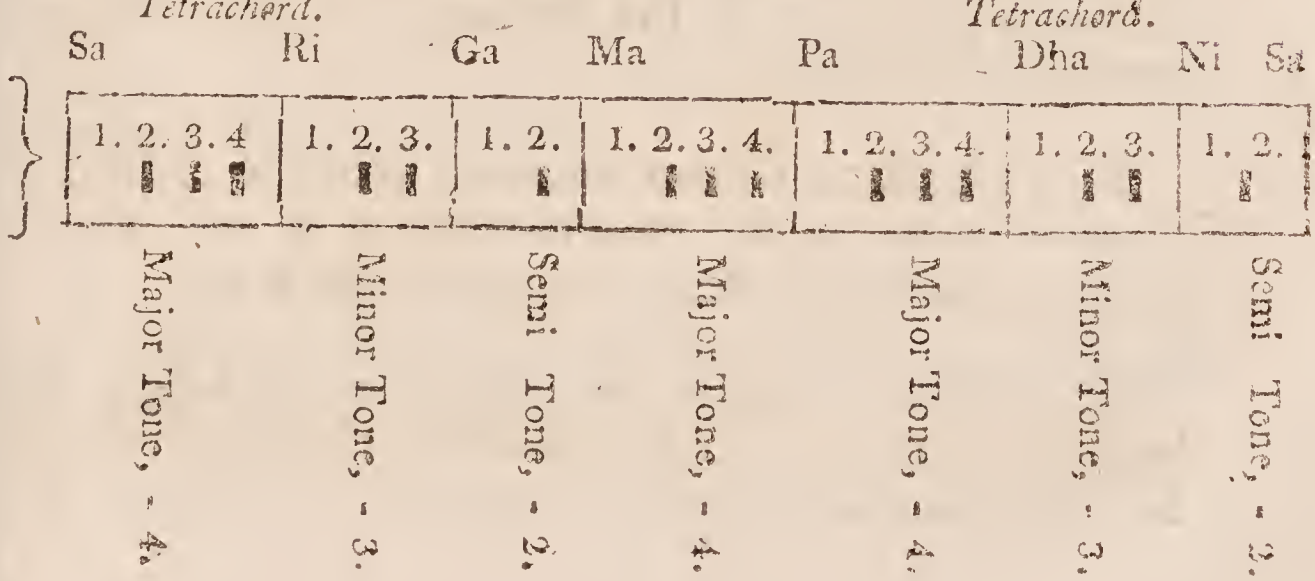
To *Madhyama* or *Ma* .... 4 { *Rájicá* / *Prasarani* / *Priti* / *Márjani*

To *Nisháda* or *Ni* .... 2 { *Upta* / *Cábiri*

To *Panchama* or *Pa* .... 4 { *Cirti* / *Ractá* / *Dipari* / *Alápini*

THE *Hindus* have three *Grámas* or scales: viz. *Shadja-Gráma*, *Madhyama-Gráma*, and *Gándhára-Gráma*. The foregoing arrangement of the *S'ruti* is that of the *Shadja Gráma*, which consists of two disjunct, but perfectly similar, *Tetrachords*, separated by a major tone. The *Madhyama-Gráma* is formed from this, by a transposition of the major tone between *Pa* and *Dha*, and of the minor tone between *Dha* and *Ni*; thus the technical language of *Hindu* music, *Dha* takes one *S'ruti* from *Pa*, and becomes thus possessed of four, leaving three to *Pa*.

THE two *Grámas* may be thus represented.



	Sa	Ri	Ga	Ma	Pa	Dha	Ni
Madhyama Gráma,	1. 2. 3. 4.	1. 2. 3.	1. 2.	1. 2. 3. 4.	1. 2. 3.	1. 2. 3. 4.	1. 2
	Major Tone, - 4.	Minor Tone, - 3.	Semi Tone, - 2.	Major Tone, - 4.	Minor Tone, - 3.	Major Tone, - 4.	Semi Tone, - 2.

When the change of key requires a different modulation, the changes in the disposition of the *S'ruti* are called *Vicrĭt:* they reckon twelve such.

When a note is to be rendered graver or deeper, they say that such a note takes one or more *S'ruti* from the note immediately below it, as in the example of the change from the *Shadja Gráma* to the *Madhyama Grama*, where *Dha* is made one *Sruti* flatter than in the former scale.

If a note is to be raised, the expression is, that such a note gives one or more *S'ruti* to the note immediately below it; which operation renders the note proportionally sharper, as its distance from the note immediately below it is consequently increased; and, to that immediately above it, the distance is in the same proportion diminished.

The *Gandhara Grama* is formed from the *Madhyama Grama*; and, in the construction of it, the *Sangita Darpana* points out three changes in the scale.

1st. *Gand'hara* takes one *Sruti* from *Rĭshabha*, and becomes of three, i. e. by rendering the third note *Ga* flat, the interval between *Ri* and *Ga* is reduced to a

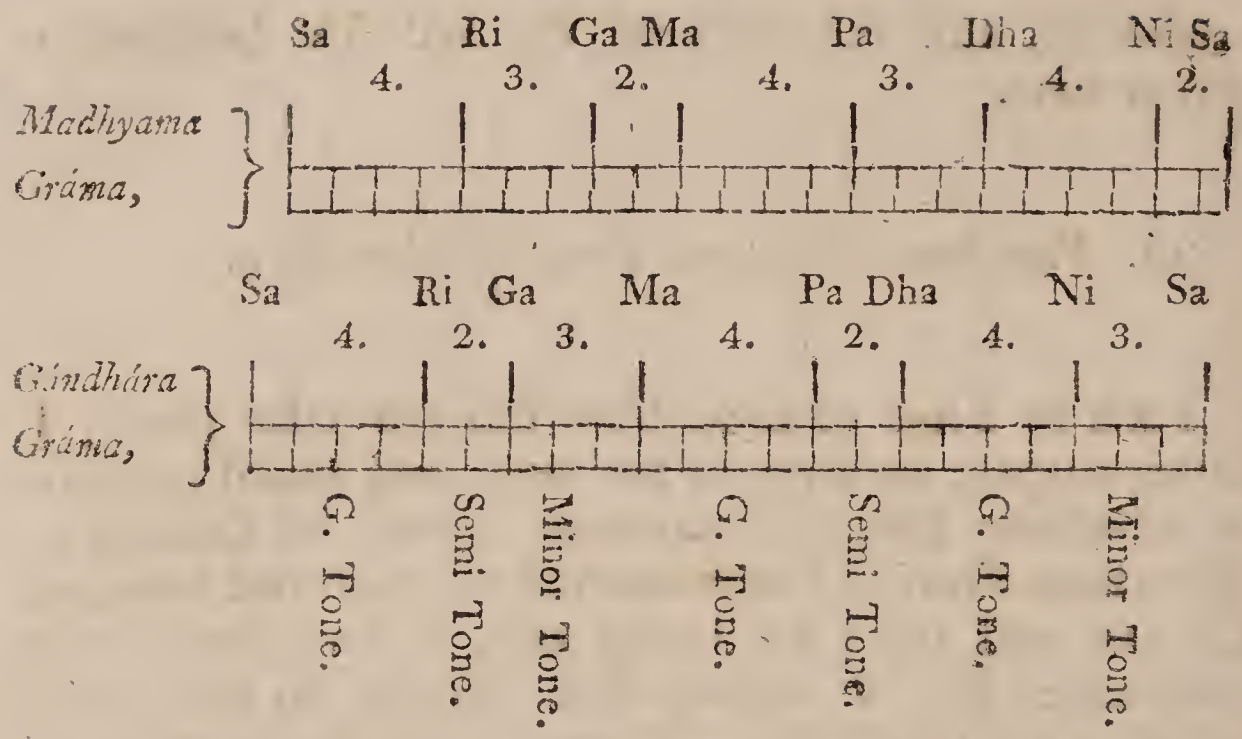
semi-tone, and that between *Ga* and *Ma* becomes a minor tone.

2d. *Panchama* loses one *S'ruti* to *Gandhara*.

I AM at a loss to know how this can take place: I rather suspect an error in the text, and would propose to substitute *Dha* the sixth note instead of *Gandhara*. The three *S'ruti* of *Panchama* make the interval between the 5th and 6th: by losing one, it is reduced to a semi-tone; but it cannot lose this one to *Gandhara*, which is the third note. There are but two methods of reducing this interval to a semi-tone: one by raising the fifth note; the other by rendering the sixth flat. But here the interval between the 4th and 5th remains unaltered. It must in this case be done by making *Dha* the 6th note flat; or, in the language of *Hindu* music, by giving one of *Panchama's S'rutis* to *Dhaivata*.

3d. *Suddhaswara* gives one *S'ruti* to *Nishada*. Here *Nishada* is rendered one *S'ruti* flat. *Suddhaswara* is not the name of a note; but is explained to me to be a term applied to a note possessing its full compliment of *S'rutis*. It may, therefore, be applied, in this case, to *Dhaivata*; for, although it may give one *S'ruti* to *Nishada*, yet it gains one from *Panchama*, and still retains four complete *S'rutis*.

IF these conjectures are admitted, and we compare it with the *Madhyama Grama* (to which these changes evidently refer), it will stand thus:



THAT the *Hindus* probably, by this division of the octave, meant nothing more than what I have before supposed, may appear from the following table, in which the intervals, between each note and the note above it, are taken from Mr. MALCOLM's series of the octave in the two modes (as given by Mr. CHAMBERS under the article scale). This I have done, in order to compare those intervals with the *S'ruti* of the *Hindus*, and to show the difference.

MALCOLM's series of the octave.

$\frac{3}{9}$ $\frac{5}{6}$ $\frac{4}{4}$ $\frac{2}{3}$ $\frac{5}{8}$ $\frac{5}{9}$ $\frac{1}{2}$

Minor Mode
or
Gándhára Gráma.

What they are as stated by the *Hindus.*	What they ought to be if the scale was divided into 22 paats or the whole string into 44.	Proportion of the intervals between each note, and the note above it.	The difference between.
4	$4\frac{8}{9}$	$\frac{1}{9}$	1 & $\frac{8}{9}$
2	$2\frac{4}{9}$	$\frac{1}{18}$	$\frac{8}{9}$ & $\frac{5}{6}$
3	$3\frac{2}{3}$	$\frac{1}{12}$	$\frac{5}{6}$ & $\frac{3}{4}$
4	$3\frac{2}{3}$	$\frac{1}{12}$	$\frac{3}{4}$ & $\frac{2}{3}$
2	$1\frac{5}{6}$	$\frac{1}{24}$	$\frac{2}{3}$ & $\frac{5}{8}$
4	$1\frac{1}{13}$	$\frac{5}{72}$	$\frac{5}{8}$ & $\frac{5}{9}$
2	$2\frac{4}{9}$	$\frac{1}{18}$	$\frac{5}{9}$ & $\frac{1}{2}$

MALCOLM's series of the octave.

$\frac{3}{9}$ $\frac{4}{5}$ $\frac{3}{4}$ $\frac{2}{3}$ $\frac{3}{5}$ $\frac{8}{15}$ $\frac{1}{2}$

Major Mode
or
Madhyama Gráma.

What they are as stated by the *Hindus.*	What they ought to be if the scale was divided into 22 parts or the whole string into 44.	Proportion of the intervals between each note, and the note above it.	The difference between.
4	$4\frac{8}{9}$	$\frac{1}{9}$	1 & $\frac{8}{9}$
3	$3\frac{41}{45}$	$\frac{4}{45}$	$\frac{8}{9}$ & $\frac{4}{5}$
2	$2\frac{1}{5}$	$\frac{1}{20}$	$\frac{4}{5}$ & $\frac{3}{4}$
4	$3\frac{2}{3}$	$\frac{1}{12}$	$\frac{3}{4}$ & $\frac{2}{3}$
3	$2\frac{14}{15}$	$\frac{1}{15}$	$\frac{2}{3}$ & $\frac{3}{5}$
4	$2\frac{14}{15}$	$\frac{5}{75}$	$\frac{3}{5}$ & $\frac{8}{15}$
2	$1\frac{7}{15}$	$\frac{1}{30}$	$\frac{8}{15}$ & $\frac{1}{2}$

If we revert to the *Shad'ja Grama*, we shall find it composed of two disjunct, but perfectly similar *Tetrachords*, separated by a major tone: both *Tetrachords* are expressed by the name numbers 4. 3. 2; and, if we reject the fractions of the first *Tetrachord* in the foregoing table, we have the same number: and, as they considered the 2d *Tetrachord* as perfectly similar to the first, they probably made use of the same numbers to express that similtude.

There are three kinds of characteristic melody for the structure of *Ragas*, either by the use of all, or the exclusion of one, or two, particular notes. Those *Ragas*, in which the whole seven notes are employed, are called *Hamir*, *huran*. Those, which exclude one particular note, and only use the remaining six, are called *Cad'hir*. Those, which exclude two particular notes, and only reserve five, are called *Orav*. There is a passage in Dr. Burney's history of music, and one in the British Encyclopædia (speaking of the *Guglia Rotta* *, or the broken pillar lying in the *Campus Martius* at *Rome*,) by which it appears, that there is on this pillar or obelisk the figure of a musical instrument with two strings and with a neck; that, by the means of its neck, this instrument was capable, with only two strings, of producing a great number of notes; that these two strings, if tuned fourths to each other, would furnish that series of sounds called by the antients *Heptachord*, which consists of a conjunct *Tetrachord* as B. C. D. E; E. F. G. A; if tuned in fifths, they would produce *an octave*, or two *disjunct Tetrachords*.

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* A fragment of an *Egyptian* obelisk of the highest antiquity, which had been brought to *Rome* under Augustus. It is covered with Hieroglyphics.

This may possibly explain the principle of the construction of the *Shadja Gráma* of the *Hindus*; and there is a similar instrument still in use, called *Dwitantri*, which I have often seen and heard; and, as far as I remember, it is tuned in fifths. It consists of a wooden body, hollowed out and covered with parchment; it has a neck and two strings, and is struck with a plectrum.

The *Madhyama Gráma* is evidently our major mode; and, if I am right, that of *Gándhára* is our minor mode.

The extent of the *Hindu* scale is three *Septacas*; which are thus fancifully described: the lowest or first *Septaca*, called *Mundra sthána*, is derived or produced from the navel, extending upwards to the chest; the second *Madhyasthána*, from the chest to the throat; the third *Târasthana*, from the throat to the brain.

The scale is denominated *Gráma*, (literally village,) because there is in it the assemblage of all the notes, *S'rutis* and *Múrchhanás*, arranged in their proper places, as mankind assemble in towns and villages, and there assume their different degrees and stations.

In considering the names given to the three *Grámas*, it appears to me, that the *Shadja Gráma* takes its name from the lowest note in that scale, as being the foundation of the first *Tetrachord*; the second *Tetrachord* being apparently formed from the first by fifths: in which case the 6th must necessarily be more *acute* than in the *Diatonic* scale; and the interval between the 5th and 6th is therefore represented by four *S'rutis* to signify, that *Dha* bears the same proportion to *Pa*, that *Ri*

does to *Sa*. The intervals of the *Shadja Gráma* may be represented as follow :

8	4	3	2	16	8	1
9	5	4	3	27	15	2

Sa ri ga ma pa dha ni sa

THE modulation of the *Madhyama Gráma* probably took its rise from making *Madhyama* the 5th note in the scale : in which case you will have

Ni sa ri ga ma pa dha.

OR,

Si ut re mi fa sol la.

THIS is precisely the diatonic scale of the *Greeks*; and here it became necessary to render *Dha* a comma lower in the scale, which the *Hindus* express by making *Dha* receive one *S'ruti* from *Pa*. The alteration, thus suggested, they adopted; and with it formed their 2d scale from the *Shadja Gráma*, giving it the name of *Madhyama*, probably to denote its origin.

THE *Gándhára Gráma* appears to have a similar origin; by making *Gándhára* the 5th. This will produce.

Dha ni sa re ga ma pa.

OR

La si ut re mi fa sol.

WHICH is the natural minor mode *La:* but keeping *Sa* as their first note, the *Vicrits*, or changes before mentioned, became necessary, to give it the same modulation; and it was probably called *Gándhára Grama* to denote its origin.

Of the notes and *S'rutis* I have spoken above. I shall now endeavour to explain what these *Múrchhanas* are; or rather what I conceive them to be. Each *Grama* is said to contain seven *Múrchhanas:* hence they reckon twenty-one in all.

Sir W. Jones says they appear to be no more than seven pieces of diapason multiplied by three, according to the difference of pitch in the compass of three octaves *. But the *Múrchhanas* are described to be the seven notes, each arranged in its proper station in the scale, which renders them fit to be applied in the composition of the *Ragas*, &c. It appears to me therefore, that they are the intervals of each *Grama*, which I would arrange as follows.

The *S'hadja Grama* is composed of two disjunct but perfectly similar *Tetrachords*, separated by a major tone, and both *Tetrachords* have a major third; the *Múrchhanas* of this *Grama* I suppose to be

1st.	from Sa to Ri	1st.	2d.
2d.	—— Sa to Ga	1st.	3d.
3d.	—— Sa to Ma	1st.	4th.
4th.	from Pa to Dha	2d.	2d.
5th.	—— Pa to Ni	2d.	3d.
6th.	—— Pa to Sa	2d.	4th.
7th.	—— Pa to Sa		8 octave.

* In citing a passage from the Epick Poem on the death of Sisupala, which is entitled *Mágha*, Sir W. Jones translated *Murchhana*, "musical interval." (See As. Res. vol. 1st. p. 265.) He afterwards gave a different interpretation of it, (vol. 3d. p. 71,) as stated in the text. In his version of that passage, Sir W. Jones mistook the meaning of the term *Sruti*, (which is there translated ear, instead of quarter tone,) but he has rightly explained it in his treatise on the musical modes of the *Hindus*. H. T. C.

THE *Murchhanás* of *Madhyama Grama*:

2d. from Sa to Ri.
3d. —— Sa to Ga, greater third.
4th. —— Sa to Ma.
5th. —— Sa to Pa.
6th. —— Sa to Dha, greater sixth.
7th. —— Sa to Ni.
8th. —— Sa to Sa.

Múrchhaná of *Gándhára Gráma*:

Sa to Ri.
Sa to Ga, minor third.
Sa to Ma.
Sa to Pa.
Sa to Dha, minor fixth.
Sa to Ni.
Sa to Sa.

THE *Múrchhanás* are all personified, and diftinguifhed by names *, viz.

THOSE of the *Shadja Gráma*, are:

1ft. *Uttara mundá.*
2d. *Uttarayita.*
3d. *Réchaní.*
4th. *Sud'haprajaya.*
5th. *Sancita.*

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* This lift is apparently from the *Sangita Retnacara.* The perfonified *Murch'hanas* have other names in the *Sangita Damodara.* H. T. C.

6th. *Chacranta.*

THOSE of *Madhyama Grama*, are:

1st. *Saubiri.*
2d. *Harina.*
3d. *Culopantá.*
4th. *Sudha mad'hya.*
5th. *Marghi.*
6th. *Purvi.*
7th. *Rĭshica.*

THOSE of *Gaudhára Gráma*, are:

1st. *Mandrá.*
2d. *Vis'ála.*
3d. *Sumuc'hi.*
4th. *Chitra.*
5th. *Rohini* or *Chitravati.*
6th. *Suc'ha.*
7th. *Alapa.*

THE use of these *Múrchhanas* is, in my opinion, to teach the learner to rise an octave by tones and semitones; and to descend again by the same notes; and to rise and fall by greater intervals, directly, by omitting the intermediate notes; in ſhort the practice of solmisation.

APPENDIX.

On the institution of the Asiatick Society, it was determined, that, in publishing the Researches of the Society, mere translations of considerable length should not be admitted, except of such unpublished essays or treatises as might be transmitted by native authors.

In modification of this rule, it was agreed, at a meeting held on 2d July, 1806, that the Society do publish, from time to time, in volumes distinct from the *Asiatick Researches*, translations of short works in the *Asiatick* languages, and extracts and descriptive accounts of books of greater length, which may be offered to the Society and appear deserving of publication.

As this publication may be expected gradually to extend to all *Asiatick* books, of which copies may be deposited in the library of the Society, and even to all works extant in the languages of *Asia*, the series of volumes will be entitled Bibliotheca Asiatica, or a descriptive Catalogue of *Asiatick* books with extracts and translations.

Oriental scholars are invited to communicate to the Society such translations and descriptive accounts of *Asiatick* books, as they may be disposed to give to the learned world through this channel of publication.

S. Rousseau, *Printer*,
Wood Street, Spa Fields.

Table of *Nacshatras* or Asterisms marking the Moon's Path.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Names of the *Nacshatras*.	Aswiní.	Bharaní.	Critticá.	Róhiní.	Mrigasiras.	Árdrá.	Punarvasu.	Pushya.	Aslésha.	Mag'há.	P. Phálguní	U. Phálguní	Hasta.	Chitrá.	Swáti.	Visác'há.	Anurád'há.	Jyésht'há.	Múla.	P. Ásháḍ'ha	U. Ásháḍ'ha	Abhijit.	Śravana	D'hanishṭ'há.	Śatabhishá.	P. Bhádrapada.	U. Bhádrapada.	Révatí.
Presiding deities or regents of each asterism.	The *Aswins.*	Yama.	Fire.	Prajápati.	The moon.	Rudra.	Aditi.	Vrihaspati.	The Serpents.	The *Pitris.*	*Bhaga.*	Aryaman.	*Savitri* or the Sun.	Twashtri.	Air.	Indra and fire.	Mitra.	Indra.	Nirriti, a *Ráeshas.*	Water.	The *Viswédévas.*	Brahma.	Vishnu.	The *Vasus.*	Váruńa.	Ajapat.	Ahibrad'hna.	Pushan.
The figures of the *Nacshatras* according to Śrípati, &c.	A horse's head.	The *Yóni.*	A razor or knife.	A wheeled Carriage.	An antelope's head.	A gem.	A house.	An arrow.	A potter's wheel.	A house.	A couch or bedstead	A bed.	A hand.	A pearl.	A coral bead.	A festoon.	A row of oblations	A ring.	A lion's tail.	A couch.	An elephant's tooth.	A triangular nut	Three footsteps.	A drum or tabor.	A circle.	A figure with a double face.	A couch or bed.	A tabor.
Their figures according to other authors.				A temple*.				A crescent.*						A lamp.†	A gem.* A pearl.†			An earring.†	A couch.	An elephant's tooth.‡	A bed‡.	A triangle.‡	A trident†.			A couch,‡ or bed.‡	A figure with two faces.‡	
Number of stars according to Śripati, &c.	3	3	6	5	3	1	4	3	5	5	2	2	5	1	1	4	4	3	11	2	2	3	3	4	100	2	2	32
Other numbers assigned by different authorities.	2†						2†					5†				2†	3†		9†	4†	4†	2*		5†				
Relative situation of the principal star; according to the *Súrya Sidd'hánta.*	N.	S.	S.	E.	N.		E.	Middle.	E.	S.	N.	N.	2d W. of 1st N. W.			N.	Middle.	Middle.	E.	N.	N.	Brightest	Middle.	W.	Brightest	N.	N.	S.
Place of the star in 6ths of degrees from the origin of the *Nacshatra;* according to the same.	48	40	65	57	58	4	78	76	14	54	64	50	60	40	74	78	64	14	6	4	Middle of the preceding *Nacshatra*	End of P. *Ásháḍ'ha.*	End of U. *Ásháḍ'ha.*	Third quarter of the last.	80	36	22	79
Its place, in degrees, from the origin of the Ecliptic.	8°	20°	37° 30′	49° 30′	63°	67° 20′	93°	106°	109°	129°	144°	155°	170	180°	199°	213°	224°	229°	241°	254°	260°	266° 40′	280	290°	320°	326	337°	359° 50′
Its distance from the Ecliptic.	10° N.	12° N.	5° N.	5° S.	10° S.	9° S.	6° N.	N.	7° S.	N.	12° N.	13° N.	11° S.	2° S.	37° N.	1° 30′ S.	3° S.	4° S.	9° S.	5° 30′ S.	5° S.	60 N.	30° N.	36° N.	0 30′ S.	24° N.	26° N.	N.
Place of the star in degrees, measured on the Ecliptic, according to Brahmegupta.	8°	20°	37° 23′	49° 28′	63°	67°	93°	106°	108°	129°	147°	155°	170°	183°	199°	212° 5′	224° 5′	229° 5′	241°	254°	260	265°	278°	290°	320°	326°	337°	360°
Distance from the Ecliptic.	10° N.	12° N.	4° 31′ N.	4° 33′ S.	10° S.	11° S.	6° N.	N.	7° S.	N.	12° N.	13° N.	11° S.	2° S.	37° N.	1° 23′ S.	1° 44′ S.	3° 30′ S.	8° 30′ S.	5° 20′ S.	5° S.	62° N.	30° N.	36° N.	0 18′ S.	24° N.	26° N.	N.
Place in degrees measured on the Ecliptic, according to the *Sidd'hánta Siróman'i.*	8°	20°	37° 28′	49° 28′	63°	67°	93°	106°	108°	129°	147°	155°	170°	183°	199°	212° 5′	224° 5′	229° 5′	241°	254°	260°	265°	278°	290°	32 0	326°	337°	60°
Distance from the Ecliptic.	10° N.	12° N.	4° 30′ N.	4° 30′ S.	10° S.	11° S.	6 °N.	N.	7° S.	N.	12° N.	13° N.	11° S.	1° 45′ S.	37° N.	1° 20′ S.	1° 45′ S.	3° 30′ S.	8° 30′ S.	5° 20′ S.	5° S.	62° N.	30 N.	36° N.	0 20′ S.	24° N.	26° N.	N.
Place in degrees measured on the Ecliptic, according to the *Graha lághava.*	8°	21°	38°	49°	62°	66°	94°	106°	107°	129°	148°	155	170°	183°	198°	212°	224°	230°	242°	255°	261°	268°	275°	286°	320°	3 25	337°	360°
Distance from the Ecliptic.	10° N.	12° N.	5° N.	5° S.	10° S.	11° S.	6° N.	N.	7° S.	N.	12° N.	13° N.	11° S.	2° S.	37° N.	1° S.	2° S.	3° S.	8° S.	5° S.	5° S.	62° N.	30° N.	36° N.	N.	24° N.	27° N.	N.
True longitude, according to the *Sidd'hánta Sárvabhauma.*	12° 40′	25° 8′	39° 2′	48° 9′	61° 1′	65° 8′	94° 53′	106°	109°	129°	142° 48′	150°	175° 13′	183° 50′	182° 24′	212° 36′	224 38′	230° 5′	248° 36′	254° 34′	260° 21′	262° 10′	280° 3′	294° 12′	319° 15′	335° 8′	348° 44′	359° 50′
True latitude.	10° 50′ N.	12° 55′ N.	4° 44′ N.	4° 40′ S.	10° 12′ S.	11° 7′ S.	6° N.		7° 4′ S.		12° 42′ N.	13° 55′ N.	12° S.	1° 52′ S.	41° 5′ N.	1° 25′ S.	1° 30′ S.	3° 28′ S.	8° 40′ S.	5° 22′ S.	5° S.	62° 14′ N.	30° 5′	26° 25′ N.	0 45′ S.	26° 8′ N.	28° N.	
Star supposed to be meant.	α Arietis.	Musca.	η Tauri. Pleiades.	α Tauri. Aldebaran.	λ Orionis.	α Orionis.	β Geminorum.	δ Cancri.	α 1 and 2 Cancri.	α Leonis. Regulus.	δ Leonis.	β Leonis.	γ or δ Corvi.	α Virginis. Spica.	α Bootis. Arcturus.	α′ or κ Libræ.	δ Scorpionis.	α Scorpionis. Antares.	ν or υ Scorpionis.	δ Sagittarii.	τ Sagittarii.	α Lyræ.	α Aquilæ.	α Delphini.	λ Aquarii.	α Pegasi.	α Andromedæ.	ζ Piscium.

* Vasishṭ'ha. † Sácalya. ‡ *Muhúrta chintámani.*